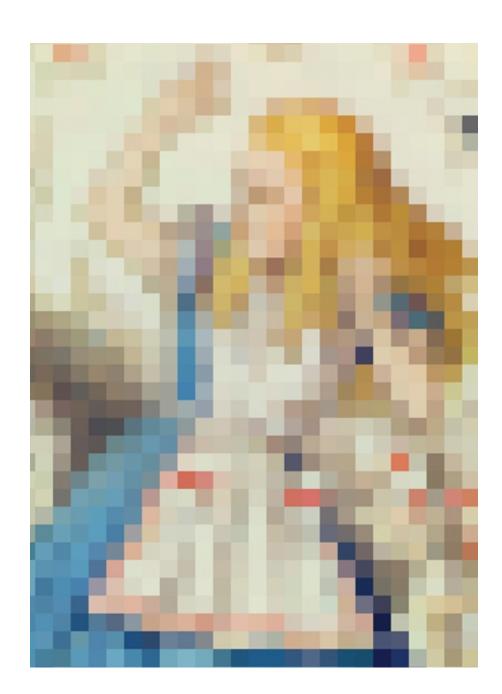


THE FULL TEXT OF
LEWIS CARROLL'S NOVEL

WITH ITS MANY HIDDEN MEANINGS

REVEALED BY

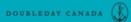
DAVID DAY



Alice's Adventures in Wonderland

DECODED

by David Day





COPYRIGHT © 2015 DAVID DAY

All rights reserved. The use of any part of this publication, reproduced, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise, or stored in a retrieval system without the prior written consent of the publisher—or in the case of photocopying or other reprographic copying, license from the Canadian Copyright Licensing Agency—is an infringement of the copyright law.

Doubleday Canada and colophon are registered trademarks of Random House of Canada Limited Library and Archives of Canada Cataloguing in Publication is available upon request ISBN: 978-0-385-68226-8

ISBN: 978-0-38568227-5 (epub) *Editor*:

Tim Rostron

Editorial Assistants:

Loribeth Gregg

Kiara Kent

Carly McMillan

Zoe Maslow

Peter Phillips

Melanie Tutino Managing Editor:

Susan Burns

Design:

CS Richardson

Production Director:

Carla Kean Published in Canada by Doubleday Canada, a division of Random House of Canada Limited, a Penguin Random House Company www.penguinrandomhouse.ca



TO RÓISÍN, MY IRISH ROSE, AND TERRY JONES, MENTOR AND FRIEND

Cover
Title Page
Copyright
Dedication

INTRODUCTION

i. What's in a Name?ii. A Portmanteau Mindiii. Wonder Words and Riddles

iv. The Reason Why

PART ONE:

ALICE'S ADVENTURES IN WONDERLAND

Prelude Poem: All in the Golden Afternoon *Three Fatal Sisters*

Chapter 1: Down the Rabbit-Hole *The White Rabbit*

Chapter 2: The Pool of Tears *Curious and Curiouser*

Chapter 3: A Caucus-Race and a Long Tale *The Dodo and the Dodgson*

Chapter 4: The Rabbit Sends in a Little Bill *A Temple to Science*

Chapter 5: Advice from a Caterpillar *De Quincey's Caterpillar*

Chapter 6: Pig and Pepper *The Kitchen Oracle*

Chapter 7: A Mad Tea-Party A Socialist Tea Party

Chapter 8: The Queen's Croquet-Ground *Games in the Garden*

Chapter 9: The Mock Turtle's Story *Ruskin and the Gryphon*

Chapter 10: The Lobster Quadrille *Stalking Tennyson*

Chapter 11: Who Stole the Tarts? *Trial of the Heart*

Chapter 12: Alice's Evidence *A House of Cards*

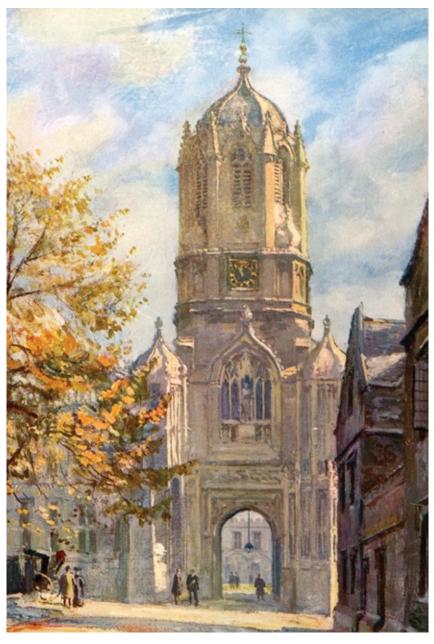
PART TWO:

AFTER WONDERLAND

- i. Sentence First—Verdict Afterwards!
- ii. From Alice to Malice
- iii. Through the Looking-Glass and Beyond
- iv. Last Years

Bibliography Acknowledgements Image Credits About the Author "... who will deny that Oxford, by her ineffable charm, keeps ever calling us nearer to the true goal of all of us, to the ideal, to perfection,—to beauty, in a word, which is only truth seen from another side?..." Matthew

Arnold, Essays in Criticism, 1889.



Tom Gate, the main entrance to Christ Church, Oxford: The college was Dodgson's home for most of his life.

Introduction

I. WHAT'S IN A NAME? "Somehow it seems to fill my head with ideas only I don't know what they are!" Alice might very well have been describing any reader's first encounter with her adventures. Something peculiar and quite magical is happening in the word spell that is *Wonderland*.

No one had written anything quite like *Alice's Adventures in Wonderland* before, and—save for its sequel, *Through the Looking-Glass*—no one has written anything like it since. It is a child's adventure set in a fantastic imaginary world that is explored by a brave little girl armed only with her own common sense and an all-consuming curiosity. It is a book that can and should be read for pleasure by the young, but looking at the author's unique use of language, it is remarkable that children can comprehend it at all. And yet somehow they do, and we do. Furthermore, it evokes in all its readers a tantalizing sense that there is something else to be revealed just under the surface of this compelling tale.

Charles Lutwidge Dodgson was a British mathematician, logician, clergyman and photographer. A resident Oxford don for almost half a century, he was famously known as Lewis Carroll, the author of two great children's classics.

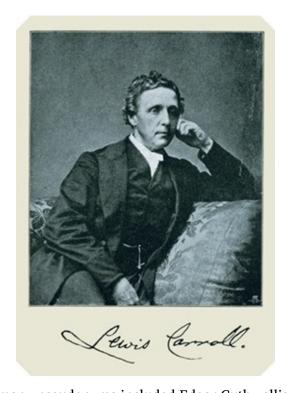
Alice's adventures have become part of popular culture worldwide, and have been translated into virtually every language. If these adventures were just flights of fancy, or simply "nonsense" as Dodgson/Carroll liked to call them, why, you might ask, are they so often quoted by physicists, philosophers, mathematicians, political scientists, historians, psychiatrists, logicians, poets, filmmakers, novelists and computer geeks?

Wonderland has an undeniably strange atmosphere, in part because it is largely inhabited by literary tropes—that is, imaginary beings with no existence except as figures of speech or as characters from children's

rhymes, fairy tales or myths. These are creatures such as the Cheshire Cat, the Mad Hatter, the March Hare, the Mock Turtle, the Gryphon and the King and Queen of Hearts. In *Wonderland*, real things like hedgehogs and flamingos are treated as objects, while objects like playing cards and numbers behave like real things.

Also, as many critics have pointed out, *Wonderland* is a complex and sophisticated construct full of literary allusions, parodies and variations of other fairy tales, rhymes and songs: Robert Southey's *Goldilocks* and "The Old Man's Comforts," Goethe's "Sorcerer's Apprentice," Aesop's "Belling the Cat" and "The Tortoise and the Hare," Isaac Watts's "How Doth the Little Bee" and "The Sluggard," James Sayles's "Star of Evening," William Mee's "Alice Gray," Mary Howitt's "The Spider and the Fly" and Charles Lamb's "The King and Queen of Hearts."

In all things, Dodgson felt the need for disguises of one form or another. Just as he always insisted on separating the life of the mathematician Charles Dodgson from that of the author Lewis Carroll, so was he careful to visually differentiate the real dark-haired Alice Liddell from his fictional blonde "dream-child moving through the land / Of wonders wild and new."



Charles Dodgson's many pseudonyms included Edgar Cuthwellis and Mad Mathesis.

Insight into the mind of Charles Lutwidge Dodgson can be gained by looking at a few of his numerous pseudonyms, such as Mad Mathesis, Balbus, Dares, Edgar Cuthwellis and Edgar U. C. Westhill. The first of these obviously refers to his vocation as a mathematician, the second is a classical allusion to the Roman Balbus the Stutterer (an affliction shared by Dodgson), the third relates to his birthplace of Daresbury and the final two are anagrams of his first two names, Charles Lutwidge.

These are simple enough, but Dodgson also invented many other fairly obscure variations of his name or initials. One typical example was Mr. De Ciel—pronounced "Mr. D. C. L."—a scrambling of his initials, C. L. D. Elsewhere, he used the signature "Sea l'd," pronounced "sealed" or "C. L. D." And even more obscurely, on one occasion Dodgson used as a pen name the initials R. W. G.: the fourth letter in each of his names.

And then of course there is the Reverend Dodgson's celebrated pen name, Lewis Carroll. As most Carroll fans know, Dodgson began by translating his first two given names, Charles Lutwidge, into Latin, to arrive at Carolus Ludovicus. He then reversed the order of those names and translated them back into English, to arrive at "Lewis Carroll."

This much we know from Dodgson's own correspondence. Yet there is another possible level of interpretation, consistent with this author's obsession with multilingual wordplay. As the classically educated Charles Dodgson knew full well, *ludo* is Latin for "I play" and *carol* is both English and Old French for "a joyous song"—so "Lewis Carroll" could have the wonderfully appropriate meaning "I play a joyous song."

From an early age, Charles Dodgson wrote stories, plays, fairy tales, poems, riddles and games. He saw in literature a wide variety of types of entertainment that children loved; that would benefit them by keeping boredom, despair and temptation at bay; and that would—as he strove to do (in a manner unlike any other children's author) in his eventual writing of the Alice books—subliminally educate them.

In the mid-Victorian era, beyond the occasional visit to the music hall or theatre, it was up to every middle-class family to find a means to entertain themselves most evenings. Every child was required to acquire at least one party piece: the recitation of a song, poem or dramatic monologue. Dodgson organized hundreds of theatrical evenings, party

games and events for, and with, children. The eldest son and third child of a family of seven sisters and four brothers, Dodgson took on this role in the family home in Daresbury, Cheshire. He also wrote plays, poems and songs for the amusement of his siblings. And later, as a bachelor don at Christ Church, he continued to find great pleasure in the organizing of such events with the children of leading members of Oxford society. Consequently, *Wonderland* is full of games, charades, poems, jokes, songs, conundrums, riddles and puzzles.

Charles Dodgson had systems for just about everything. If an activity was without a clear set of rules or methodology, he seems to have been compelled to supply one. He created, for example, a cross-indexed and synopsized registration system for his personal correspondence. Over a thirty-five-year period, this personal register recorded 98,721 letters written, received, acknowledged and answered. Nor was this all by any means. Over his lifetime, Dodgson gathered and tabulated a multitude of other letter registers, diaries, accounting systems, journals, accounts, numerical tables and minutely detailed records.

Dodgson and his alter ego also created scores of original games. Although he never played at cards until he was in his early twenties, Dodgson, only nine days after playing his first game, decided he was fully qualified to invent new ones. He created variations of whist and cribbage, and several entirely original card games, such as Court Circular and Ways and Means. As well, he invented numerous other games not involving cards: Lanrick, Croquet Castles, Circular Billiards, Doublets, Syzygies, Mischmasch, The Game of Logic and one very like what became Scrabble.

If rules and systems were already in place, Dodgson seemed compelled to improve upon them. He reinvented the rules and scoring systems for backgammon, croquet, the postal system, railway timetables, lawn tennis, draughts, chess, charades, library cataloguing, wine storage, letter-writing etiquette, long division, calendars, money orders, picture mounting, table plans, bet placing, scales for measuring drinks and devices for writing in the dark.

Similarly, when he found himself involved in college elections and university committees, he became obsessed with the mathematics of voting. The result was his publication of a number of complex new systems based on what we now know as proportional representation.

Dodgson's childhood tutor remembered him as an extremely advanced mathematics student who appeared to suffer physical pain if he could not resolve a problem. This same tutor wrote: "He is capable of acquirements and knowledge far beyond his years, while his reason is so clear and so jealous of error, that he will not rest satisfied without a most exact solution of whatever appears to him obscure."

Dodgson spent his entire life attempting to categorize and systematize the world around him. So when, as Lewis Carroll, he came to create his own world of *Wonderland*, there can be little doubt that its laws and structure were systematically organized and completely thought out in every minute detail.



Dodgson "when I'm lecturing": From a letter of 1868.

II. A PORTMANTEAU MIND The popular view that *Wonderland* is simply a charming fairy tale full of frivolous nonsense that was made up on a summer's day is one that Lewis Carroll was happy to foster. Just as a magician would not wish to reveal the years of hard work and machinery behind some grand illusion, the author Lewis Carroll—along with Charles Dodgson the amateur magician—did not want his fairy tale to appear as anything less than an effortless work of pure imagination.



One of the test audiences for *Alice's Adventures Under Ground*: Dodgson with the wife and children of George MacDonald, fantasy author and Christian minister.

According to the version of events often given by the author, the fairy tale was "extemporized on the spot" at the urging of three little sisters that he and another Oxford divinity student took on a boating expedition on a branch of the river Thames on July 4, 1862. That evening, at the insistence of one of the children, the eponymous Alice, Dodgson promised to write the tale down, so it might be shared with others.

In one account of the composition of this fairy tale, the author suggests that *Wonderland* was but one of scores of fairy tales that he orally composed for these and other children. "Yet none of these many tales got written down: they lived and died, like summer midges, each in its own golden afternoon." No doubt Dodgson/Carroll told children many clever fairy tales on scores of afternoon outings, but it is absurd to claim *Wonderland* was an oral composition entirely made up and recited in a single afternoon.

In fact, aspects of the *Wonderland* story were composed long before. Anecdotal evidence suggests that Dodgson was telling a version of the down-the-rabbit-hole tale to children as early as 1854. And certainly, we know a version of the Knave of Hearts's letter-poem was published in 1855, ten years before the publication of *Wonderland*.

Even if we take the author's word for it, and accept the date of July 4, 1862, as the inspirational first day of composition, Dodgson's own diaries refute the legend of *Wonderland*'s instantaneous composition. Some five weeks after the seminal voyage, Charles Dodgson was struggling with its composition, and impatiently complained: "had to go

on with my interminable fairy-tale of 'Alice's Adventures.' " Another five weeks pass before his diary confesses that he once again "Began writing the fairy-tale for Alice, which I told them July 4, going to Godstow—I hope to finish it by Xmas."

A full seven months after the boat trip, Dodgson's diary triumphantly reports: "Alice's Adventures Under Ground...is now finished (as to the text) though the pictures are not yet nearly done." However, the text of the story that we know as Alice's Adventures in Wonderland was not yet nearly done at all. It was not even half done.

Alice's Adventures Under Ground was simply the author's earliest version, just four chapters and 12,715 words in length. This was a meagre output for seven months' labour, if we are to believe that Dodgson was simply scribbling down a written version of an orally composed story.

Even more significantly, this early version of the story did not contain many of *Wonderland*'s most complex and memorable characters and incidents. There was no Ugly Duchess, Cook or Cheshire Cat; no Mad Hatter, March Hare or Dormouse. There was no Duchess's kitchen, Mad Tea-Party, Mock Turtle's story, Lobster Quadrille or Trial of the Knave of Hearts.

All of these were written in over the following two years. The full text of *Wonderland* was 26,211 words long. Then, Dodgson commissioned and carefully oversaw the creation of forty-two original illustrations. Its first appearance in the form of a complete published book was on July 4, 1865, exactly three years after the seminal river voyage.

Alice's Adventures in Wonderland over the last century and a half has been subjected to analysis by scores of scholars from a multitude of disciplines. The difficulty is that each seemingly rational insight into Wonderland is contradicted by the revelations of previous or subsequent analysis.

Yet the key to the Alice books may be discovered in their curious manipulation of language and layers of meaning. Humpty Dumpty in *Through the Looking-Glass* inadvertently provides us with a useful word for describing the machinations of his creator's mind. He says of words such as *slithy*, a combination of *lithe* and *slimy*, that it is like a

portmanteau, with "two meanings packed up into one word." The portmanteau was a Victorian folding suitcase that could be packed in layers. It is an excellent metaphor for this author: the man with the portmanteau mind.

The mystery of *Wonderland* is like the plot of Agatha Christie's *Murder on the Orient Express*. Inspector Hercule Poirot's investigation is hampered by too many suspects and too many clues. The victim died as a result of a dozen deep knife wounds to the heart and lungs. All twelve passengers on the train had motive, opportunity and access both to the victim and to the murder weapon, but in the end everyone also proved to have an unshakable alibi provided by one or more of the other suspects. It seemed impossible that any one of the twelve could have committed the crime. Yet, as no one else was on the train, it seemed impossible that one of the twelve did not.

Then the inspector has a flash of inspiration: if it was impossible for any one of the twelve suspects to have committed the murder, then the only other possibility is that the murder was committed by all twelve suspects. And so it proved to be.

In *Wonderland*, a similar conspiracy and multiple systems of equal validity are at work. The man with the portmanteau mind has created a multi-layered world inhabited by characters with multiple identities.

In his preface to *Through the Looking-Glass*, Carroll explains that there are two initial levels to the story: the fairy tale and the chess game (in which each chess piece is matched up with a character in the tale). Once within his Looking-Glass world, he has his Red Queen inform us that she is aware of five more levels of existence. The Red Queen tells Alice that she lives in a "poor thin way" by living only one day at a time, and how in the Queen's country, rather, they live "five nights together" where it is "five times as warm, and five times as cold—just as I'm five times as rich as you are, *and* five times as clever!"

In his introduction to his later fairy novel, *Sylvie and Bruno Concluded*, Lewis Carroll explains: "It may interest some of my Readers to know the theory on which this story is constructed.... I have supposed a Human being to be capable of various psychical states, with varying degrees of consciousness." He provides the reader with a listing of five levels of existence, and "supposing that Fairies really existed; and that they were sometimes visible to us, and we to them," he then presents an indexed

chart identifying which level each of his characters assumes in each chapter—as well as which identity each character assumes on each of these levels.

The characters in *Alice's Adventures in Wonderland* also have multiple identities that may operate on different levels of existence. And so we have a conspiracy of the entire cast of *Wonderland* characters in this assumption of multiple identities.

All these levels stem directly from Dodgson's studies and personal interests. He graduated from Oxford with a First in mathematics, a Second in classics and a Third in philosophy and history. Added to this, there was his lifelong fascination with spiritualism and his immense interest in and enjoyment of music both sacred and profane. Each of these themes is to be discovered in this multi-layered story.

The primary level of the fairy tale provides the framework for all other levels: historic, philosophic, mythological, theosophical and mathematical interpretations are all possible. These and other disciplines all make their contributions, and many of these are discussed in this book's extensive annotations, notes and running commentaries on each chapter.

Alice's Adventures in Wonderland is—among all the many things it can be viewed as—a time capsule from a time and place that was at a historic turning point in human intellectual history: Oxford University in the Victorian age. The novel, it emerges, is a who's who of Oxford at the height of its power and influence in the world.

Consequently, the commentary of *Alice's Adventures in Wonderland Decoded* primarily concerns itself with the life and times of Charles Dodgson, Alice Liddell and the other real mid-Victorian historical figures who are the basis for the characters and creatures that inhabit Wonderland.

III. WONDER WORDS AND RIDDLES Today, most children have some experience of Carroll's kind of storytelling through playing computer games. On entering an underground labyrinth, Alice is given the choice of golden keys, magic mushrooms, cakes and potions that allow her to change her size or shape or to gain entry into other regions. She encounters strange and wonderful creatures: sometimes hostile, sometimes friendly.

Riddles and hidden clues are to be found everywhere in this fairy tale. Like a modern gamer at her computer, Alice must make critical choices to find her way through this maze. She must endure adventures and trials before discovering the means of triumphing over the tyrannical Queen of Hearts and safely returning to her waking life.

It is only in *Wonderland*'s triggering mechanisms that this fairy-tale game varies superficially from contemporary multi-levelled computer games. Language is the key to *Wonderland*'s mysteries. The facility and flexibility of language informs all literature, of course. But nobody has ever used language in quite the way Lewis Carroll did in his Alice books. Carroll makes the English language—and the story he is telling—operate on many levels simultaneously. In *Wonderland*, icons in the form of key characters or images, puns, homophones and allusions serve as clues and signposts to indicate the various levels of Alice's adventures.

Take, for example, the meaning of the word *mean*: signify, intend, clarify, define, stingy, poor and nasty. In his satire *The Vision of the Three T's*, Carroll absurdly stretches out the meaning of *mean*: "You must know, then, that there be three Means treated of in Mathematics. For there is the Arithmetic Mean, the Geometric and the Harmonic. And note further, that a Man is that which falleth between two magnitudes.... and is in truth the Non-harmonic Mean, the Mean Absolute. But that the Mean, or Middle, is ever the safer course...." *etc.*

Elsewhere, Carroll suggests that if we have the means to study time, we will soon discover a day in mean-time is quite different from a day in mean solar time, or a day in terms of a mean sun. Then, too, one might suggest it is no mean feat to find any means to live within one's means ... ad infinitum.

Humpty Dumpty might have been describing Carroll's approach when he says, "When I use a word, it means just what I choose it to mean—neither more nor less." Or as Carroll himself said in a letter to a friend, writing about his stance as a logician: "I shall take the line 'any writer may mean exactly what he pleases by a phrase so long as he explains it beforehand.'

Except in *Wonderland*, the author *doesn't* explain it beforehand. And poor Alice's problem is that most of the entities she encounters speak a formal language that is logical from the perspective of a philosopher or a mathematician, say, but nonsense in everyday ordinary speech. This is

particularly true on the mathematical level.

At the tea party, for instance, Alice is bewildered by the bizarre wordplay of the Mad Hatter and the March Hare, and complains: "The Hatter's remark seemed to her to have no sort of meaning in it, and yet it was certainly English." She recognizes that they are speaking in logically structured English sentences, but is also correct in concluding that the conversation has no sort of meaning—or perhaps no more meaning than an algebraic expression has in ordinary speech.

Similarly, when the King of Hearts in the trial ponders "Important—unimportant—important—' as if he were trying which word sounded the best," the regent is not being frivolous. He is quite properly conducting a trial to test each word for "soundness" (in what mathematicians call a "well-formed formula" or "wff"). The King's judgment is based on the logically "sound" structure of a sentence or formula, not on its meaning in ordinary speech.

Formal languages and rules were developed by such specialists as mathematicians, physicists and computer scientists in order to eliminate the ambiguities inherent in natural languages like English, Latin and Greek. Carroll has reversed this process by employing formal languages and rules in the context of everyday English (and sometimes Latin, Greek and French) to create more ambiguities, thereby allowing a vast expansion of wordplay.

Carroll has stretched to its limits the power of language to communicate, and it is astonishing that the Alice fairy tales do not collapse under the weight of all these parallel meanings. Rather, the tales actually make sense—albeit comic nonsense. In fact, no real nonsense is spoken by any character: each is making sense on a different level by using everyday words with different definitions. *Alice's Adventures in Wonderland* is like a symphony comprising many separate tunes, each one fully independent and coherent in its own right, and all combining to make a masterpiece.

IV. THE REASON WHY But why? Why would anybody write a children's story in a code that is almost impenetrable even to adults? Why in God's name would anyone want to inflict complex theories of mathematics, theosophy, politics and philosophy on an unsuspecting child?

Well, if you were the Reverend Charles Dodgson, you would do it in God's name. I suppose these days we would call it subliminal advertising for Christ. The Reverend Dodgson was a devout High Anglican Churchman. The education and spiritual enlightenment of children was one of the most hotly debated political and religious issues of the nineteenth century, and an obsession of Dodgson himself.

Time and again he spoke and wrote about the church's insensitivity to children. He deplored how they were forced to endure hours of boredom in services that only alienated them from the beauty and wonder of worship. Dodgson was a fan of the theatre, much to the displeasure and embarrassment of his fellow clergy, including his own father. But his rebuttal was that the theatre at its best was doing what the church was failing to do: engaging and enlightening the young.

What Charles Dodgson loved about the theatre was, first, its capacity to communicate spiritual and emotional realities and, second, its capacity "to convey a higher truth straight to the soul, bypassing the intellect." This is exactly what Lewis Carroll was attempting with the Alice stories.

Wonderland is a kind of memory palace constructed exactly as a cathedral is constructed: as an analog of the world and all its secrets. The magnificence of High Mass in a cathedral will fill the worshipper with wonder, but its great spiritual secrets are hidden in the sacred geometry of its architecture, the deep philosophy of its language and the mathematical complexities of its music.

For Alice, his wonder child, Lewis Carroll created an enthralling secular equivalent to High Mass in a specially constructed temple of wisdom. Alice's journey through Wonderland was based on the classical myths and ancient mystery cults that enacted a maiden's descent into the underworld. It came complete with initiation rites, baptisms, processions, catechisms, epiphanies and dialogues with saints, mystics and sages.



Christ Church Library: Dodgson first saw Alice Liddell through the window overlooking the Deanery garden.



Dodgson lived in rooms in Tom Quad, Oxford's largest and grandest quadrangle: Its Rosicrucian and Freemason influences are reflected in *Wonderland*.

With *Wonderland*, Lewis Carroll gave Alice Liddell the great gift of a classical education. It was delivered secretly and subliminally, but in the Victorian age, it was a gift no girl would have been permitted to receive in any other way.

Not that Carroll was always entirely secretive about the pedagogical subtext of his stories—especially when it came to mathematics. Fifteen years after the publication of *Wonderland*, he began publishing a series of stories (described as Knots) under the collective title *A Tangled Tale* in a

magazine called *The Monthly Packet*. In the preface, Carroll was uncharacteristically revealing about the subtext: "The writer's intention was to embody in each Knot (like medicine so dexterously, but ineffectually, concealed in the jam of our early childhood) one or more mathematical questions—in Arithmetic, Algebra, or Geometry, as the case might be—for the amusement, and possible edification, of the fair readers of that Magazine."

Carroll's belief in the mystical significance and subliminal power of symbols and language was not a personal quirk; rather, it was fundamental to his religion. The High Anglican Church (like the Catholic and Orthodox faiths) believed that the souls and spirits of its followers should be guided toward the truth of religion not by logical mental forces but by the symbolic and mystical forces of sacred language, ritual and images—ideas that Carl Jung would later confirm in his own psychological studies in *Man and His Symbols*.

He noted, too, that the beauty of choral music extended its healing influence on the faithful, even though its composition was based on a complex mathematical system of harmonics that was far beyond their understanding, and that church architecture lifted the spirits not just of the elite within the priesthood who understood the philosophical significance of the sacred geometry behind it. And by many it was also believed that when High Mass was delivered in Latin, the power behind the words reached the soul of even someone ignorant of the language.

A founding tenet of the Anglican Church was that its esoteric wisdom could only be entrusted to an enlightened priesthood. The average worshipper could not possibly be expected to understand. The best and the brightest of Churchmen took this stance, not because they believed that God's creations were devoid of logical forces and reason—many, Charles Dodgson among them, believed absolutely that the logical constructs of sacred geometry, mathematics and harmonics were God's plan built into every material thing. But they believed—with some justification—that all these theories would confuse the general population and result in a sea of bafflement and doubt.

It has been said of Dante Alighieri's The Divine Comedy, another famous

underground adventure: "Well-nigh all the encyclopedic erudition of the Middle Ages was forged and welded, in the white heat of an indomitable will, into [its] steel-knit structure." Although Lewis Carroll's descent into his underworld makes for lighter reading than Dante's, something similar might be said of his creation of *Wonderland*. Carroll compresses into his fairy tale the entire syllabus of a classical education of his time, and the book is a time capsule of the intellectual history of the Victorian Age.

The Wonderland years marked the turning point at which the ancient classical education system was gradually coming to an end and the university as we know it today was born. And as unfit as it was to survive intact in the modern world, it must be said there was much to admire in the ancient tradition of a classical education and its preservation of the deep roots of Western civilization through the Latin and Greek languages. It was a pan-European, Latin-speaking culture that attempted to reclaim the wisdom and ideals of ancients through the efforts of the medieval Scholastics, the Renaissance Neoplatonists and the Enlightenment philosophers. It was a belief in an enlightened classical system that preceded academia's modern age that resulted in the specialization and fragmentation of the arts and sciences. It was a belief that all human knowledge could be encompassed in a single aesthetically beautiful system.

Matthew Arnold, the Oxford Professor of Poetry during the *Wonderland* years, was the first to deliver his lectures in English instead of Latin and was a major force on the side of liberal reform, but he also gave full expression to the almost sacred trust embodied in the conservative classical tradition of Oxford:

Beautiful city!—so venerable, so lovely, so unravaged by the fierce intellectual life of our century, so serene!...Steeped in sentiment as she lies, spreading her gardens to the moonlight, and whispering from her towers the last enchantments of the Middle Age, who will deny that Oxford, by her ineffable charm, keeps ever calling us nearer to the true goal of all of us, to the ideal, to perfection,—to beauty, in a word, which is only truth seen from another side?—nearer, perhaps, than all the science of Tübingen. Adorable dreamer,

whose heart has been so romantic! who hast given thyself so prodigally, given thyself to sides and to heroes not mine, only never to the Philistines! home of lost causes, and forsaken beliefs, and unpopular names, and impossible loyalties!

This was certainly the Oxford that the Reverend Charles Dodgson and his literary persona Lewis Carroll stubbornly embraced. Dodgson/Carroll wished to preserve the elite tradition of Oxford at all costs. But in the rapidly changing industrial world of the vastly expanding British Empire and the unprecedented expansion of science and all fields of human knowledge, this was clearly impossible.

Alice's Adventures in Wonderland could only have been written by a multi-disciplined mind schooled in this ancient tradition, and one who believed education was the most important driving force in the creation of a great civilization. And, wrong-headed as history has proved Carroll to be, in his Wonderland we have a literary monument that allows us to see what has been lost and what has been gained.

There were many fine things to admire in a classical education, and there was great beauty to be found even in its obsolescence. Like some kind of bejewelled mechanical singing nightingale in an age of the invention of the gramophone, *Alice's Adventures in Wonderland* is a demonstration of the mastery of brilliant precision and intricate beauty without any real category or obvious purpose—something aesthetic theorists might argue was the true test of a civilization's highest art forms.



Christ Church Meadow: An idyllic spot for picking flowers, drifting into a dream and falling down an infinitely deep rabbit-hole.

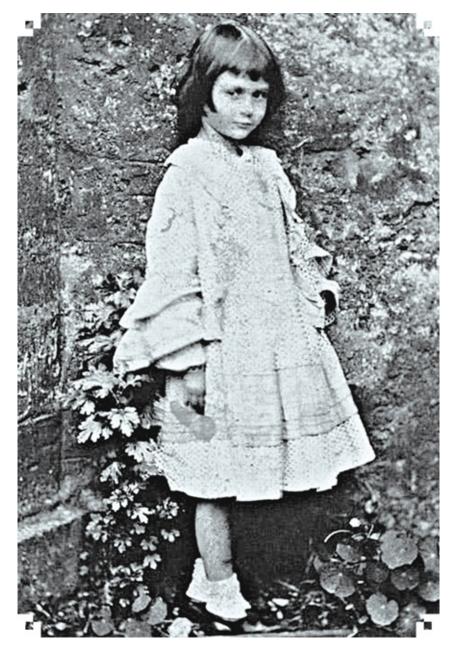
"Three eager faces, hungry for news of fairy-land, and who would not be said 'nay' to: from whose lips 'Tell us a story, please,' had all the stern immutablity of Fate!" Charles Dodgson

describing Alice Liddell and her sisters.

Part One: Alice's Adventures in Wonderland

Prelude Poem: All in the Golden Afternoon

Ah, cruel Three! In such an hour,
Beneath such dreamy weather,
To beg a tale of breath too weak
To stir the tiniest feather!
Yet what can one poor voice avail
Against three tongues together?



Dream child and aristocrat: Alice Liddell, photographed by Dodgson.

THREE FATAL SISTERS From the beginning, it was apparent that just beneath the fairy-tale surface of *Alice's Adventures in Wonderland*, there was a strong element of autobiography and social satire. It was obvious that many of the characters and places clearly had real-life counterparts in mid-Victorian Oxford. Some Lewis Carroll was happy to identify; others he was at pains to keep secret.

As Carroll always acknowledged, the real Alice was Alice Liddell

(1852–1934), daughter of Lorina Hanna Liddell (née Reeve) and Henry George Liddell, dean of Christ Church college, Oxford. Oxford in that era was at the very core of Victorian Britain's academic, ecclesiastic and political life, and most of the characters in *Wonderland* are satirical caricatures of some of the most significant figures of Victorian society. This, Alice Liddell would have known. Indeed, as the daughter of the most influential educator of the age, she knew nearly all of these luminaries personally.

In his 1887 article "'Alice' on the Stage," Carroll describes his "dream-Alice" as being loving and gentle and "courteous—courteous to all, high and low, grand or grotesque, King or Caterpillar, even though she were herself a King's daughter."

Alice Liddell may not have been "a King's daughter," but her family was certainly aristocracy. The Liddells were royal favourites, guests at Buckingham Palace and hosts of Queen Victoria and the Prince and Princess of Wales. Alice's father was the nephew of the baron of Ravensworth and first cousin of the earl of Strathmore and Kinghorne. And she certainly lived like a princess. Her home in Christ Church's Deanery had served as King Charles's palace during the English Civil War.

"The Dean, Chapter and Students of the Cathedral of Christ Church in Oxford of the Foundation of King Henry the Eighth," as it was formally entitled, holds a special place in the royal history of Britain and is the only college that is also a cathedral—and under the authority of the dean. Christ Church was one of the grandest and wealthiest colleges in Britain and certainly the most influential, producing more British prime ministers than all forty-five other Oxford colleges combined. Henry Liddell had been approved as dean by Queen Victoria and the prime minister, Lord Palmerston. His qualifications were sound: not only was he the foremost classical Greek scholar of his day and co-author of the still-authoritative A Greek-English Lexicon, for a decade Liddell had been the highly praised headmaster of Britain's most prestigious school at Westminster. He had been Prince Albert's chaplain and was later to become mentor to his and Victoria's sons, Prince Edward (the future King Edward VII) and Prince Leopold, while each was an Oxford undergraduate.

All in the golden afternoon
Full leisurely we glide;
For both our oars, with little skill,
By little hands are plied,
While little hands make vain pretence
Our wanderings to guide.

Ah, cruel Three! In such an hour, Beneath such dreamy weather, To beg a tale of breath too weak To stir the tiniest feather! Yet what can one poor voice avail Against three tongues together?



The only college that is also a cathedral: J.M.W. Turner's circa 1795 painting of Christ Church, with the Deanery, Alice's childhood home, in the foreground.

As dean, Liddell was the great architect of educational reform, working to overturn medieval statutes and rules that had been unchanged at Oxford for four hundred years. Medieval classics-based

universities set up to educate a small upper-class elite could not keep up with the vast avalanche of new scientific and technological knowledge required for the running of Britain's empire; nor could it keep up with the demands of a modern industrial-age economy. No one did more to usher in the modern secular university system in which, in theory at least, academic achievement counted more than social standing.



The Isis at Folly Bridge: Where, as the prelude poem descibes, two young college dons in straw hats and white boating suits rowed upriver with three pretty Liddell girls.

In the midst of this wave of liberal reform was Charles Lutwidge Dodgson, a junior mathematics instructor. Not yet the famous author Lewis Carroll, Dodgson's highest post at the time of Liddell's appointment was as the Christ Church sub-librarian; Alice's father was his academic superior. His ecclesiastic superior was Samuel Wilberforce, bishop of Oxford. While Dean Liddell was a liberal and a prime mover in reforming the old system of privilege and favour, Bishop Wilberforce was a ferocious opponent of reform—and therefore of the dean.

Charles Dodgson, too, was a staunch conservative who persistently conspired against virtually every one of the liberal progressive acts initiated by Dean Liddell. As Lewis Carroll—and through *Alice's Adventures in Wonderland*—he has his heroine unwittingly engaged in a satire about most of the major social and political issues of his time: Christian socialism, theosophy, spiritualism, Darwinian evolution and liberal educational reform.

Wonderland begins "all in the golden afternoon" with a prelude poem

about a real-life boating excursion that took place on July 4, 1862, on the Isis, a branch of the river Thames, near Oxford. Two young college dons in straw hats and white boating suits rowed the three pretty little daughters of the dean of Christ Church upriver on a three-mile expedition from Folly Bridge to Godstow village. They took tea on the embankment, then returned downriver to Oxford just after eight in the evening. The children were delivered home to the Deanery and were in bed before nine o'clock.

The poem chronicles this boating expedition. The three Liddell sisters, with their "little arms" and "little hands" (Liddell rhymes with "fiddle" and so sounds like "little"), are drifting lazily along in a boat when they "beg a tale" from an unnamed storyteller and are rowed along by an unnamed oarsman.

Imperious Prima flashes forth Her edict "to begin it": In gentler tone Secunda hopes "There will be nonsense in it!" While Tertia interrupts the tale Not *more* than once a minute.

Anon, to sudden silence won,
In fancy they pursue
The dream-child moving through a land
Of wonders wild and new,
In friendly chat with bird or beast—
And half believe it true.

The young college dons were the Reverend Charles Dodgson and the Reverend Robinson Duckworth. During the expedition, the girls—Lorina, Alice and Edith—begged the Reverend Dodgson to tell them a story. And so began the tale of a girl named Alice who fell down a rabbit-hole. When the party returned later that evening, Alice asked Dodgson to write down the tale so she might share it with others. "Thus grew the tale of Wonderland," Lewis Carroll was later to write. However, this story of the writing of the fairy tale is itself something of a fable, as it

seems it was nearly three years before, as Carroll wrote, all "its quaint events were hammered out." For in this time it was written, rewritten, revised, restructured and illustrated before it was finally published in 1865.

Beyond providing the fairy tale's source of inspiration, Lewis Carroll is also using this poem to provide a classical literary context. The many mythological allusions imply something deeper and more archetypal is at work behind these real-life events.

In the poem, the sisters are addressed as the "cruel Three" and ends with a description of pilgrims crowned with a "wreath of flowers." These sisters are the three Fates of antiquity, often described as clad in white with wreaths on their heads. Writing two decades later, in his article "'Alice' on the Stage," Lewis Carroll makes sure no one misses his point about the power the Liddell sisters had over his creative powers: "three eager faces, hungry for news of fairy-land, and who would not be said 'nay' to: from whose lips 'Tell us a story, please,' had all the stern immutability of Fate!"

Carroll frequently personified young girls in this way in his writing. There are many instances in his fiction, poetry and letters. To his cousin Lucy Wilcox, for example, he wrote: "I now regard you as a form of Destiny (let us say, as one of the Fates, or one of the Furies) as you are simply bringing on me a flood of strange young ladies."



Three Fates (and a brother): Alice, Lorina, Harry and Edith.

And ever, as the story drained

The wells of fancy dry,
And faintly strove that weary one
To put the subject by,
"The rest next time—" "It *is* next time!"
The happy voices cry.

Thus grew the tale of Wonderland:
Thus slowly, one by one,
Its quaint events were hammered out—
And now the tale is done,
And home we steer, a merry crew,
Beneath the setting sun.





The music of time: The Liddell sisters and "Memory's mystic band," the three Fates.

In the prelude poem, he attributes the personalities and powers of each of the Fates to a Liddell sister. He gives each of his "cruel Three" a name. "Imperious" Prima was the oldest sister, the thirteen-year-old Lorina; "gentler" Secunda was Alice, then aged ten; and Tertia was the eight-year-old Edith. The poem states that Prima orders the story "to begin," Secunda determines its contents, and the petulant Tertia "interrupts" as she pleases.

The girls thus mirror the acts of each of the Fates in classical literature. As Robert Graves states in *The Greek Myths*: "there are three conjoined Fates, robed in white.... Clotho, Lachesis, and Atropos. Of these, Atropos is the smallest in stature, but the most terrible." He also explains their roles: "the thread of life, spun on Clotho's spindle, and measured by the rod of Lachesis, is ... snipped by Atropos' shears." The Fates were portrayed sometimes as three young maidens (as Carroll

suggests), other times as maiden, woman and crone. They oversee what is, what was and what will be—the birth, life and death of mortals, nations and gods.

Alice! A childish story take,
And, with a gentle hand
Lay it where Childhood's dreams are twined In Memory's
mystic band,
Like pilgrim's wither'd wreath of flowers Pluck'd in a far-off

As Carroll suggests in this poem, these three sisters are also his inspirational muses (you can see this in his photography as well as in his writing) at whose command his dry "wells of fancy" are constantly replenished. And also when Alice falls down her rabbit-hole, we are told she "found herself falling down a very deep well."

In the Greek underworld, there were two wells. One was known as Lethe, or the Well of Forgetting; the second was Mnemosyne, or the Well of Memory. The goddess Mnemosyne was the mother of the Muses, and linked to the three little (Liddell) sisters as Carroll's muses and the source of his inspiration. In the poem, with his usual verbal sleight of hand, Carroll specifically and collectively identifies the sisters with the punning phrase "Memory's mystic band."

VICTORIAN CLASSICAL TRADITION Classical Greek and Roman literature had enormous significance in the cultural and intellectual life of Victorian England. And nowhere was this truer than at Oxford. In 1855, when Charles Dodgson was appointed lecturer at Christ Church, all university business and financial transactions were still conducted in Latin. Every student learned Latin and Greek and the architecture of virtually every college building was based on classical models, as were cultural institutions and civic organizations far beyond the university.

At Oxford, scores of student societies carried the names of classical figures, and it was common for students to assign the names of Greek gods and heroes to their tutors and professors—both as epithets of praise and to mock. These names frequently appeared in anonymous satires and squibs filled with classical allusions that attacked figures of authority at the university. Dodgson himself was one of the most notorious authors of these rather scurrilous publications. So, in tandem with his satiric assignment of real-life Oxford identities to each of his *Wonderland* characters, it was natural for him to provide many of them with classical Greek identities as well.



The Morae: The Fates conjoined, overseeing birth, life and death for each mortal, nation and god.

Chapter 1: Down the Rabbit-Hole

It flashed across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it.





Proserpine (Persephone), 1874, by Dante Gabriel Rossetti.

THE WHITE RABBIT Lewis Carroll's fairy tale about a young girl's descent underground is literally the oldest story in the world. Originally entitled *Alice's Adventures Under Ground*, Carroll's fairy tale is based on the story of the Mesopotamian goddess Inanna's descent into the underworld realm of the dead, the oldest recorded myth in world literature and one that is retold in the Babylonian myth of Ishtar and the Egyptian myth of Isis.

The story is best known as that of Persephone, the Greek goddess of spring whose descent into the underworld was one of the most popular mythological motifs in art and literature throughout Carroll's lifetime, indeed the entire Victorian age.

The myth of Persephone begins in an idyllic meadow with her older sister, the earth goddess Demeter, who—in the scandalous way of gods and goddesses—is also her mother. Persephone is idly daydreaming and picking flowers when she falls down an infinitely deep fissure into a subterranean world. She experiences many adventures and trials, but at last escapes and returns to her sister Demeter's arms.

The frame story of *Alice's Adventures*—in both the *Under Ground* and *Wonderland* versions—mirrors Persephone's journey. In Alice's case, she is sitting in an idyllic meadow with her (rather motherly) older sister, Lorina, and—while idly daydreaming and considering the picking of flowers—drifts into a dream wherein she falls down an infinitely deep hole into a subterranean world. Like Persephone, she experiences many adventures and trials, but finally escapes from the underground world and returns to the arms of her sister Lorina.



Mysteries of the Goddess: Alice as "Queen of the May."

But what of the White Rabbit? As everyone knows, the fairy tale properly begins with a little girl named Alice chasing a White Rabbit down a rabbit-hole into a strange and mysterious Wonderland deep beneath the earth. Why would Lewis Carroll choose a white rabbit as Alice's guide into this underground world?

DOWN THE RABBIT-HOLE.

Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it, "and what is the use of a book," thought Alice "without pictures or conversation?"

So she was considering in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her.

In classical times, pilgrims initiated into the Mysteries of the Goddess, dressed in white and wearing wreaths of flowers, entered her temple sanctuary at Eleusis where they re-enacted the descent and eventual celebrated return. Carroll alludes to this ancient pilgrimage in the prelude poem's final line: "Like pilgrim's wither'd wreath of flowers /

Pluck'd in a far-off land." Furthermore, and not coincidentally, he photographed Alice Liddell as "Queen of the May," dressed in white and crowned with a garland of flowers like an initiate into the Mysteries.

In this context, the White Rabbit is a clear example of what is known in most of the world's mythologies as a psychopomp, or guide of souls. These are creatures, spirits or deities who escort newly deceased souls (and sometimes the souls of dreamers) to the underworld, where they are to be judged by its rulers. In a few cases, such as that of Persephone, these souls are allowed to return to the world of the living. At various times and in different cultures, psychopomps have been associated with a variety of animals.

To some degree Carroll must have been drawing on the Celtic tradition of the Phooka, a trickster animal spirit and transformer who often takes the shape of a rabbit. The Irish Phooka is a guide to the fairy realm. (In its Welsh form, it is known as a Puca, from which Shakespeare derived his fairy spirit Puck.) And we know from his diaries that upon viewing Edwin Landseer's painting *Scene from A Midsummer Night's Dream*, Carroll observed "there are some wonderful points in it ... the white rabbit especially." And remarkably, next to the white rabbit is the miniature figure of Puck.

However, the most likely reason for Carroll's choice of the rabbit is linked to his inspiration for Alice's adventure: the myth of Persephone, the goddess of spring, and even more obviously, her British manifestation, the goddess Eostre. Both goddesses were commonly portrayed in the company of a rabbit, the symbol of spring and fecundity. Although we seldom think of the ancient symbolism of this emblematic creature, it is clearly present today. After all, our Easter rabbit is a direct descendant of Eostre's rabbit.



Eostre, the Saxon goddess of Spring, accompanied as usual by a rabbit.

There was nothing so *very* remarkable in that; nor did Alice think it so *very* much out of the way to hear the Rabbit say to itself, "Oh dear! Oh dear! I shall be late!" (when she thought it over afterwards, it occurred to her that she ought to have wondered at this, but at the time it all seemed quite natural); but, when the Rabbit actually *took a watch out of its waistcoat-pocket*, and looked at it, and then hurried on, Alice started to her feet, for it flashed across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge.

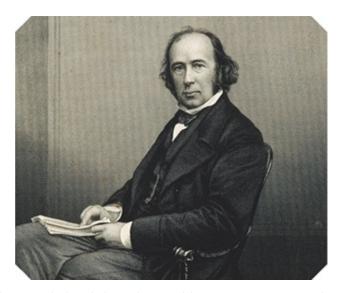
In another moment down went Alice after it, never once considering how in the world she was to get out again.

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well.

Still, the Wonderland White Rabbit with his pocket watch and

Waistcoat is an original creation, and like all the creatures in Wonderland has a historical above-ground human counterpart. The real-life Oxford White Rabbit was Alice Liddell's family physician, Dr. Henry Wentworth Acland (1815–1900). Dr. Acland was Oxford's Regius Professor of Medicine who on at least one occasion brought Alice "back to life." Like the White Rabbit who was in service to the Duchess and the King and Queen of Wonderland, Dr. Acland had served as physician to royalty: to Queen Victoria, Prince Albert and the Prince of Wales (on his tour of Canada). Like the White Rabbit, the royal doctor was often seen checking his pocket watch before rushing off to his next appointment.

Dr. Acland was also a noted anatomist and a social reformer who, in the wake of numerous epidemics in Oxford, developed an obsession with public sanitation and underground sewage systems. Consequently—and again like the White Rabbit—Dr. Acland was frequently seen climbing down into holes in the ground on his regular inspection of drainage tunnels.



The man behind the White Rabbit: Dr. Henry W. Acland.

Either the well was very deep, or she fell very slowly, for she had plenty of time as she went down to look about her and to wonder what was going to happen next. First, she tried to look down and make out what she was coming to, but it was too dark to see anything; then she looked at the sides of the well, and noticed that they were filled with cupboards and book-shelves; here and there

she saw maps and pictures hung upon pegs. She took down a jar from one of the shelves as she passed; it was labeled "ORANGE MARMALADE," but to her great disappointment it was empty: she did not like to drop the jar for fear of killing somebody, so managed to put it into one of the cupboards as she fell past it.

"Well!" thought Alice to herself, "after such a fall as this, I shall think nothing of tumbling down stairs! How brave they'll all think me at home! Why, I wouldn't say anything about it, even if I fell off the top of the house!" (Which was very likely true.)



"There are some wonderful points in it," said Carroll: Scene from A Midsummer Night's Dream.

Titania and Bottom, by Edwin Henry Landseer, circa 1850.

THE ROSICRUCIAN RABBIT Alice's descent down a rabbit-hole into Wonderland has an historic precedent in the publication of *Cabala, Mirror of Art and Nature: in Alchemy*. Published in 1615 by Steffan Michelspacher, it was dedicated "to the Brotherhood of the Rosy Cross; than which in this matter let no fuller statement be desired."

The Rosicrucian Brotherhood was a secret society whose stated mission was to advance and inspire the arts and sciences through the study of symbolic and spiritual alchemy. Initiates were instructed to undergo certain rites of passage that resulted in the attainment of ancient esoteric knowledge. Rosicrucianism arose in Bohemia in the early seventeenth century, and rapidly spread throughout Europe. In Britain, it was particularly influential in Oxford.

In the *Cabala* we discover for the first time in literature and art the pursuit of a rabbit down a rabbit-hole as a major theme in a quest. One of this book's elaborate engravings reveals that 250 years before Alice ducked down a rabbit-hole, Rosicrucian initiates were being instructed to pursue a fleeing rabbit into a similar mysterious underground world—a theme repeated in later Rosicrucian documents.

Throughout the *Cabala* we find the acronym "V.I.T.R.I.O.L." This stands for the Latin "Visita interiora terrae rectificandoque invenies occultum lapidem verum medicinalem," an instruction to the Rosicrucian initiate to "visit the interior of the earth and by rectifying discover the true medicinal stone"—the philosopher's stone. And through text and storyboard illustration, the initiate is encouraged—like Alice—to "visit the interior of the earth" and to "ferret out" the rabbit. In this context it is significant that the White Rabbit of Wonderland is fearfully certain that he will be hunted down: "as sure as ferrets are ferrets!"

The Rosicrucian notion of a secret repository for universal knowledge was an inspiration not only for the Freemasons Brotherhood and the Royal Society of London for Improving Natural Knowledge but also for Oxford's Ashmolean Institute and Museum, opened in 1683. Carroll was an active member of the institute, and the Ashmolean possessed one of the world's great Rosicrucian alchemical libraries. Among the many hermetic books, the *Cabala* was one that would have been of supreme interest to the young Christ Church sub-librarian Charles Dodgson.

As the hermetic scholar Joscelyn Godwin has observed, there probably was no such thing as "a card-carrying member of the Brotherhood," but there were a multitude over the next three centuries "who shared the ideals set forth in its manifestos." Charles Dodgson—and his alter-ego Lewis Carroll—were certainly numbered among this company.

Other symbolic images in the *Cabala* reappear in *Wonderland*. In the foreground of the engraving, we see an alchemist's initiate, blindfolded to symbolize a trance, or dream state. The figure to his left is the initiate's double, which is his dream-self. Like Alice's dream-self pursuing the White Rabbit, the initiate's dream-self double pursues a mercurial rabbit down a hole that leads into a vast and mysterious underground world beneath a mountain.

As in Alice in Wonderland, the Rosicrucian initiate discovers a secret

underground great hall for the testing of initiates. The step-pyramid that forms the foundation of the underground hall is labelled with the seven steps of the alchemical process. However, these are in the wrong sequence.

It is up to the initiate by trial and error to "rectify" and eventually understand the alchemical process, then to put them in the proper order. Similarly, in Wonderland's underground hall, Alice must learn the proper order of actions so that she may use her golden key and enter the garden.

The *Cabala* alchemist's hall is under a mountain, surmounted by seven gods/planets/metals, and is reminiscent of another of the Rosicrucian legends: the quest to discover the subterranean tomb of Christian Rosencrantz ("Christian Rose-Cross"). This seven-sided tomb was placed in an underground chamber that, like Wonderland's hall, was fitted with many doors and contained many symbolic objects: magic looking glasses, telescopes, sacred books and keys.

If we look carefully at the *Cabala* engraving, we can see on the pinnacle of the Mountain of Alchemy the true goal of the initiate: a miniature rose garden with a hedge around the fountain of Mercury. This garden of the Rosy Cross is the same garden of "bright flowers and those cool fountains" that is Alice's goal in Wonderland: the rose garden of the King and Queen of Hearts.

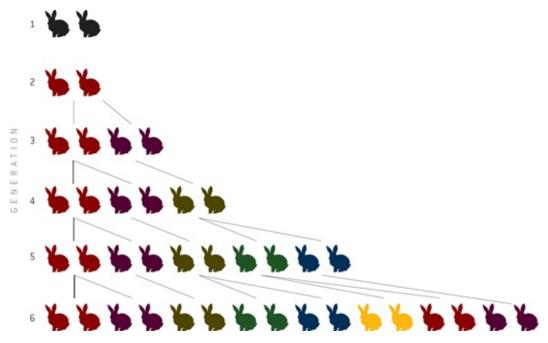


From the Cabala: Mountain of Alchemy, topped by a rose garden.

FIBONACCI'S RABBIT-HOLE At the beginning of *Wonderland*, we are told that Alice is "considering in her own mind ... whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her ... and fortunately [she] was just in time to see it pop down a large rabbit-hole."

Note how Carroll has Alice "in her own mind" gathering "a daisy-chain." As any naturalist or mathematician will tell you, daisies are unique among common flowers in having 13, 21 or 34 petals—that is, three Fibonacci numbers in sequence.

In Fibonacci's *Liber Abaci*, or "Book of the Abacus" (published in 1202), we learn that the discovery of this sequence arose from a mathematical competition in which this problem was set: "Beginning with a single pair of rabbits, if every month each productive pair bears a new pair, which becomes productive when they are one month old, how many pairs of rabbits will there be after a year?"



Fibonacci's rabbit puzzle.

The result is a sequence of numbers, each of which is the sum of the previous two numbers, starting with 0 and 1. Thus, we have an infinite series that continues with:

This pattern takes on significance if we write the numbers as decimal fractions:

```
1/1 = 1.000, 2/1 = 2.000, 3/2 = 1.500, 5/3 = 1.666..., 8/5 = 1.600, 13/8 = 1.625..., 21/13 = 1.615..., 34/21 = 1.619..., 55/34 = 1.617..., 89/55 = 1.618... and so on.
```

Now, with the ratio 89/55 = 1.618 we come to one of the most important and fascinating dimensions of the Fibonacci numbers. The further down we travel with this sequence, the closer two consecutive Fibonacci numbers divided by each other will approach what was known in antiquity as the golden ratio: approximately 1:1.618 (or, slightly more fully, 1:1.6180339887... onward to infinity).

Since the time of the ancient Greeks, this ratio was believed to be the most aesthetically perfect proportion for the human body, and it has been used in the creation of art, architecture and music. In geometry it was manifest in the golden section, golden rectangle, golden triangle and star pentagram. Fibonacci numbers combined with the golden spiral dictate the shape and growth of patterns in pine cones, pineapples, sunflowers, seashells, trees and honeycombs. Known by the symbol for the Greek letter Φ (phi), it has been called "Nature's number."

All these aspects of mathematics related to golden ratios, sections, series and so on were diligently taught to mathematics students throughout the nineteenth century and were seen as the aesthetical and logical foundation to all the arts and sciences. However, it was only during Lewis Carroll's Victorian childhood that the anecdotal aspect of Fibonacci's discovery through the breeding of rabbits became a well-known (and historically accurate) account that was taught to students of mathematics.

It is said that mathematics makes the invisible visible. So, let us look at Carroll's rabbit-hole through a mathematician's eyes. Let us examine a comparable infinite sequence in that popular classic text *Excursions in Number Theory* (1966) by C.S. Ogilvy and J.T. Anderson. There, the authors chose to create a graph or lattice using irrational $\sqrt{2}$ ratios as alternating consecutive fractions:

1/1 = 1.000, 3/2 = 1.500, 7/5 = 1.400, 17/12 = 1.416..., 41/29 = 1.416

1.413..., 99/70 = 1.414...

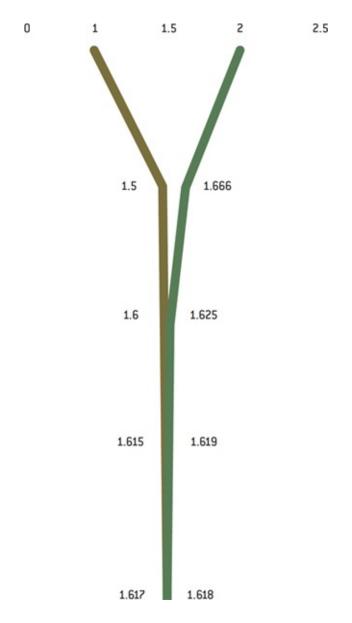
This creates the walls of a corridor that visually demonstrate how this convergent sequence progresses infinitely toward the exact value of the $\sqrt{2}$:

1:1.41421568... and onward to infinity.

If we can imagine peering down that corridor, Ogilvy and Anderson explain, "then if you were to look in that direction from the origin you would, theoretically, have a clear view ... all the way to *infinity*."

If we create a similar graph or lattice using Fibonacci ratios as alternating consecutive fractions in an infinite convergent sequence, we end up with a graph that replicates Carroll's description of Alice's descent to Wonderland through this gap in time and space: an infinite sequence of convergents oscillate to form the walls of this rabbit-hole. "Would the fall *never* come to an end?" The answer is both no and yes.

We too have constructed a tunnel with a clear view all the way to infinity. So we could answer that Alice's fall is infinite and will never end; or we may answer that it will end in what is known as an "ideal point" at infinity—which in this case is the infinite golden number, or the golden ratio known as Φ. And as this is, after all, a fairy tale, we must conclude that this "ideal point" is Wonderland: a land existing in that infinite dimension that is the human imagination—where Alice discovers the golden key: Φ.



Martin Gardner, in his *Annotated Alice*, compares Alice's long fall to "the famous 'thought experiment' in which Einstein used an imaginary falling elevator to explain certain aspects of relativity theory." Certainly, Alice's descent down the rabbit-hole does appear to be some sort of surreal "thought experiment" wherein Carroll's "dream child" is conscripted into a mathematician's demonstration.

In this context, and given Carroll's love of anagrams, one might wonder why—as Alice falls through this pre-Einstein wormhole in space and time—he has his heroine clutch at an empty jar labelled "ORANGE MARMALADE." However, if one accepts the proposition (made in the introduction) that *Wonderland* was constructed by

Carroll as an analog of the world and all its secrets, then one might reply that perhaps it is not entirely coincidental that unscrambled, the label reads: "AM ANALOG DREAMER."

Then, too, there is the White Rabbit's belief that he is always a little late. This may be a joke about Oxford's insistence on keeping "Oxford Time" as opposed to Greenwich Mean Time. The Tom Tower clock at Christ Church was set according to Oxford's longitudinal position, which is technically five minutes later than Greenwich Time. This made little difference until 1844, when the first railway was put through to Oxford, and suddenly Oxford time came into conflict with the accepted national standard time. Consequently, if Dr. Acland was setting his watch by Oxford time, he might find himself constantly late for his appointments with the Queen in London.

Besides having real-life above-ground counterparts for each of its fairy-tale characters, Wonderland also has real-life above-ground counterparts for each of its locations. As we have seen, the fairy tale begins in a real-life location: on the banks of the Isis. However, what can Alice expect to discover in the underground world at the bottom of the rabbit-hole?



Down, down, down. Would the fall *never* come to an end? "I wonder how many miles I've fallen by this time?" she said aloud. "I must be getting somewhere near the centre of the earth. Let me see: that would be four thousand miles down, I think—" (for, you see, Alice had learnt several things of this sort in her lessons in the schoolroom, and though this was not a very good opportunity for showing off her knowledge, as there was no one to listen to her, still it was good practice to say it over) "—yes, that's about the right distance—but then I wonder what Latitude or Longitude I've got to?" (Alice had no idea what Latitude was, or Longitude either, but thought they were nice grand words to say.)

Presently she began again. "I wonder if I shall fall right through the earth! How funny it'll seem to come out among the people that walk with their heads downward! The Antipathies, I think—" (she was rather glad there was no one listening, this time, as it didn't sound at all the right word) "—but I shall have to ask them what the

name of the country is, you know. Please, Ma'am, is this New Zealand or Australia?" (and she tried to curtsey as she spoke—fancy curtseying as you're falling through the air! Do you think you could manage it?) "And what an ignorant little girl she'll think me for asking! No, it'll never do to ask: perhaps I shall see it written up somewhere."



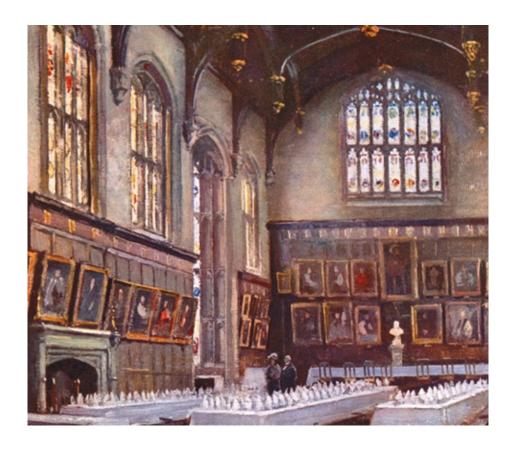
After her long fall, we are told that Alice lands with a "thump! thump!" but is otherwise unhurt. Immediately she leaps up and chases the White Rabbit down a passage and around a corner into a great hall lit by a row of lamps hanging from the roof. Upon entering Wonderland's hall in pursuit of the White Rabbit, Alice finds she is alone, and although there are many doors around the hall, they are all locked.

On a second inspection, Alice discovers a glass table on which she finds a tiny golden key that unlocks a little curtained door leading into "the loveliest garden you ever saw." But the door is too small for Alice to even get her head through. How will she get to the garden? Why does she wish to gain entry to the garden? And what is this great hall?

The Great Hall of Christ Church is the above-ground model for the great hall of Wonderland. Christ Church boasted one of the largest and grandest ancient halls in Britain. Built by Cardinal Wolsey in 1524, for nearly five centuries it has been the dining hall for students and faculty. Its walls are lined with portraits of its deans and famous graduates. It has been the scene of many grand dinners with notable heads of state

and royalty. It has also been used as a location in numerous films, including as the Great Hall of Hogwarts in the Harry Potter series.

Down, down, down. There was nothing else to do, so Alice soon began talking again. "Dinah'll miss me very much to-night, I should think!" (Dinah was the cat.) "I hope they'll remember her saucer of milk at tea-time. Dinah, my dear! I wish you were down here with me! There are no mice in the air, I'm afraid, but you might catch a bat, and that's very like a mouse, you know. But do cats eat bats, I wonder?" And here Alice began to get rather sleepy, and went on saying to herself, in a dreamy sort of way, "Do cats eat bats? Do cats eat bats?" and sometimes, "Do bats eat cats?" for, you see, as she couldn't answer either question, it didn't much matter which way she put it. She felt that she was dozing off, and had just begun to dream that she was walking hand in hand with Dinah, and saying to her very earnestly, "Now, Dinah, tell me the truth: did you ever eat a bat?" when suddenly, thump! thump! down she came upon a heap of sticks and dry leaves, and the fall was over.



BEHIND THE CURTAIN As a classicist and a mathematician, Carroll has created an initiation hall in Wonderland comparable to that of the most ancient cult of mathematicians, the Pythagoreans. This explains the symbolic meaning of the hall's curtained door. Pythagoreans had two categories of followers: the *exoterikoi* (exoteric) and the *esoterikoi* (esoteric); that is, "before the curtain" and "behind the curtain." The *exoterikoi* were known as the *akousmatikoi* (listeners), and they were permitted to hear the master's lectures only in the outer sanctum of the temple. The fully initiated *esoterikoi* were known as the *mathematikoi* (learners), and they were allowed to pass through the curtained door into the inner sanctum where the mysteries were fully revealed.

Alice very much wishes to pass through the curtained door as one of the initiated *mathematikoi*, but first she is put through a series of tests. To gain entry, she must consider "in her own mind" whether it "would be worth the trouble" of putting together a chain of reasoning: Alice's metaphoric "daisy-chain." The neophyte begins with this riddle of the golden key and the curtained door: it is a riddle about ratios and proportions and the proper sequential order.

Throughout the Wonderland adventures, Alice and the narrator use the phrase "at any rate." In the Wonderland hall, we are told, the golden key "at any rate" will open only the tiny door, and that the passage behind door is the size of a "rat-hole" (a typical Carrollian riddle: rat-0 = ratio), which explains why the golden key —as the golden ratio $[1/\Phi = 1 + \Phi = \Phi]$ —fits the lock of the curtained door.

Although Alice can open the curtained door with the golden key, the door and the passage beyond are so small that "she could not even get her head through the doorway." Disappointed, Alice makes a rather peculiar wish and observation: "Oh, how I wish I could shut up like a telescope! I think I could, if I only knew how to begin." She returns to the glass table, where she hopes to find "at any rate a book of rules for shutting people up like telescopes."

One explanation for this wording is that Alice is, in fact, looking

for a book of logarithms: a book of mathematical tables that are used for calculating exponential rates of expansion or contraction—a process that might theoretically be used for "shutting people up like telescopes."

Perhaps Alice can't find this book of logarithms because it is actually "the book her sister was reading" before she went down the rabbit-hole—a book that Alice summarily dismissed: "what is the use of a book ... without pictures or conversations?" It now appears that this book of rules and numbers would be very useful in resolving problems with ratios and proportions.

Failing to discover a book or another key, Alice does find a bottle labelled "DRINK ME." When she drinks from it, she shrinks to just ten inches, and exclaims: "What a curious feeling! I must be shutting up like a telescope." Subsequently, she eats a cake in a glass box labelled "EAT ME," and is again alarmed when she grows into a "great girl" some nine feet tall. Once again Alice compares this process of expansion and contraction to the opening and closing of a telescope: "'Curiouser and curiouser!' cried Alice...'now I'm opening out like the largest telescope that ever was!' "Why is Carroll repeatedly using the mechanics of a telescope? What is he hinting at?

In mathematics, the "telescoping series rule" has a specific meaning in calculus that could be applied to Alice's attempts to control her size. Calculus is the mathematics of change, and the manipulation of the infinitely large and the infinitely small. These are exactly the problems Alice is confronted with in Wonderland.



Alice is on the right track when she says, "Oh, how I wish I could shut up like a telescope! I think I could, if I only knew how to begin." The telescoping series rule appears to be what she requires. It is the formula for determining to what number a convergent telescoping series converges.

This is one of the only two common rules in calculus where you can determine what a convergent series converges to. The other rules for determining convergence or divergence do not allow you to do this—and, in Alice's case, would result in uncontrolled and comic shifts in size and proportion.

Calculus takes the regular rules of algebra and geometry and applies them to fluid, evolving problems. If Alice applies these rules, she may eventually overcome the many fluid and evolving problems she encounters as she passes through Wonderland's mathematical maze.

Strangely enough, in Dodgson's time, resident undergraduates at Christ Church were not required to attend classes or meet with tutors. They were, however, required to take a certain number of meals in the hall as a qualification for graduation. The Great Hall was seen as a kind of waiting room where undergraduates had to abide until they were sufficiently prepared for a viva voce, or oral examination, before a panel of eccentric tutors. Successful candidates would then be granted graduate degrees and entry into a life in the "gardens of academia."

In Wonderland, Alice is confronted with a comparable scenario. Like the Christ Church undergraduate, she is compelled to loiter in the great hall, where she consumes a requisite number of peculiar meals and endures viva voce interrogation by a number of eccentric tutors before learning how to use her golden key to gain entry into "the loveliest garden you ever saw."



Wonderland's hall is here: Temple of Ceres at Eleusis, by Joseph Gandy, 1818.

Alice was not a bit hurt, and she jumped up on to her feet in a moment: she looked up, but it was all dark overhead; before her was another long passage, and the White Rabbit was still in sight, hurrying down it. There was not a moment to be lost: away went Alice like the wind, and was just in time to hear it say, as it turned a corner, "Oh my ears and whiskers, how late it's getting!" She was close behind it when she turned the corner, but the Rabbit was no longer to be seen: she found herself in a long, low hall, which was

lit up by a row of lamps hanging from the roof.

There were doors all round the hall, but they were all locked; and when Alice had been all the way down one side and up the other, trying every door, she walked sadly down the middle, wondering how she was ever to get out again.

Suddenly she came upon a little three-legged table, all made of solid glass; there was nothing on it except a tiny golden key, and Alice's first thought was that it might belong to one of the doors of the hall; but, alas! either the locks were too large, or the key was too small, but at any rate it would not open any of them. However, on the second time round, she came upon a low curtain she had not noticed before, and behind it was a little door about fifteen inches high: she tried the little golden key in the lock, and to her great delight it fitted!

On the mythological level, the counterpart to the Wonderland hall is the great hall in the Temple of Demeter-Persephone at Eleusis. Known as the Telesterion, or Hall of the Initiates, this was where all Eleusinian pilgrims gathered. Here they were tested on their knowledge of the procedures of the Mysteries before entering a labyrinth of chambers where they witnessed miraculous tableaux or epiphanies relating to the myth of Persephone—all of which we shall find are mirrored in Alice's adventures.

In Wonderland's Telesterion-like hall, certain objects are displayed: the glass table with the golden key, the bottle with the label reading "DRINK ME," the glass box with the cake marked "EAT ME"—all of which test and provoke Alice in her attempts to gain entry through the curtained door and into the inner sanctum of Wonderland's garden.

After she fails the initial test of the golden key and the curtained door, Alice finds herself wandering through a labyrinth (exactly like the pilgrim in the Mysteries) where one *tableau vivant* after another is revealed: the Pool of Tears, the Rabbit's House, the Caterpillar and the Mushroom, the Duchess's Kitchen, the Cheshire Cat, the Mad Hatter's Tea Party. Each tableau is a riddle that reveals an essential life lesson so Alice may eventually learn how to use the golden key to achieve her aim of passing behind the curtain and through the little door to the garden.

In the Eleusinian Mysteries, the initiate's fast is broken by a special psychoactive drink of barley and pennyroyal called *kykeon*, taken in the Telesterion where certain "hiera" (sacred objects) are revealed to them, as they recite, "I have fasted, I have drunk the *kykeon*, I have taken from the *kyste* [box] and after working it have put it back into the *kalathos* [basket]."

The rites in the Mysteries comprised three elements: *dromena* ("things done"), which was a dramatic re-enactment of the Demeter/Persephone myth; *deiknumena* ("things shown"), a display of sacred objects; and *legomena* ("things said"), commentaries accompanying the display of the sacred objects.

Alice opened the door and found that it led into a small passage, not much larger than a rat-hole: she knelt down and looked along the passage into the loveliest garden you ever saw. How she longed to get out of that dark hall, and wander about among those beds of bright flowers and those cool fountains, but she could not even get her head through the doorway; "and even if my head would go through," thought poor Alice, "it would be of very little use without my shoulders. Oh, how I wish I could shut up like a telescope! I think I could, if I only knew how to begin." For, you see, so many out-of-the-way things had happened lately, that Alice had begun to think that very few things indeed were really impossible.

There seemed to be no use in waiting by the little door, so she went back to the table, half hoping she might find another key on it, or at any rate a book of rules for shutting people up like telescopes: this time she found a little bottle on it, ("which certainly was not here before," said Alice), and round the neck of the bottle was a paper label, with the words "DRINK ME" beautifully printed on it in large letters.

The exact nature of these three elements—known as *apporheta* ("unrepeatables")—cannot now be ascertained, as repeating them carried a penalty of death for initiates, who were sworn to secrecy. Consequently, Carroll creates his own version of a series of dramatic tableaux, rituals and sacred objects throughout Wonderland for Alice the

initiate, who must follow the pattern of "things done," "things shown" and "things said" in order eventually to emerge back into the world as an enlightened soul.

In Wonderland's version of the Telesterion, Alice, like any prospective initiate into the Mysteries, must take the sacraments of drink and food. On the glass table she finds a golden key that opens the door to the garden. She cannot enter, though, as she is too large, and so she returns to the table. There she finds a little bottle labelled "DRINK ME," which seems to contain some kind of psychoactive mixture very like *kykeon* that gives her the illusion that she shrinks almost to the point of vanishing. To remedy this, she resorts to the contents of a box labelled "EAT ME," which is comparable to the Eleusinian *kyste*, whose contents "must be worked." Alice discovers that nothing happens initially after consuming the contents of her box, until "she set to work," and finds it causes her to grow very large.

On all levels, Alice certainly undergoes an education of sorts. However, she will have to endure a good number of interrogations and consume a number of strange meals before she is permitted to enter her garden. Indeed, her initial attempts to acquire the key to the door leading to the garden fail, literally ending in tears.

It was all very well to say "Drink me," but the wise little Alice was not going to do *that* in a hurry. "No, I'll look first," she said, "and see whether it's marked 'poison' or not"; for she had read several nice little histories about children who had got burnt, and eaten up by wild beasts and other unpleasant things, all because they would not remember the simple rules their friends had taught them: such as, that a red-hot poker will burn you if you hold it too long; and that if you cut your finger very deeply with a knife, it usually bleeds; and she had never forgotten that, if you drink much from a bottle marked "poison," it is almost certain to disagree with you, sooner or later.

However, this bottle was *not* marked "poison," so Alice ventured to taste it, and finding it very nice (it had, in fact, a sort of mixed flavour of cherry-tart, custard, pineapple, roast turkey, toffee, and hot buttered toast), she very soon finished it off.

"What a curious feeling!" said Alice. "I must be shutting up like a telescope."

And so it was indeed: she was now only ten inches high, and her face brightened up at the thought that she was now the right size for going through the little door into that lovely garden. First, however, she waited for a few minutes to see if she was going to shrink any further: she felt a little nervous about this; "for it might end, you know," said Alice to herself, "in my going out altogether, like a candle. I wonder what I should be like then?" And she tried to fancy what the flame of a candle is like after the candle is blown out, for she could not remember ever having seen such a thing.

After a while, finding that nothing more happened, she decided on going into the garden at once; but, alas for poor Alice! when she got to the door, she found she had forgotten the little golden key, and when she went back to the table for it, she found she could not possibly reach it: she could see it quite plainly through the glass, and she tried her best to climb up one of the legs of the table, but it was too slippery; and when she had tired herself out with trying, the poor little thing sat down and cried.

"Come, there's no use in crying like that!" said Alice to herself, rather sharply. "I advise you to leave off this minute!" She generally gave herself very good advice (though she very seldom followed it), and sometimes she scolded herself so severely as to bring tears into her eyes; and once she remembered trying to box her own ears for having cheated herself in a game of croquet she was playing against herself, for this curious child was very fond of pretending to be two people. "But it's no use now," thought poor Alice, "to pretend to be two people! Why, there's hardly enough of me left to make *one* respectable person!"

Soon her eye fell on a little glass box that was lying under the table: she opened it, and found in it a very small cake, on which the words "EAT ME" were beautifully marked in currants. "Well, I'll eat it," said Alice, "and if it makes me grow larger, I can reach the key; and if it makes me grow smaller, I can creep under the door; so either way I'll get into the garden, and I don't care which happens!"

She ate a little bit, and said anxiously to herself, "Which way? Which way?", holding her hand on the top of her head to feel which way it was growing, and she was quite surprised to find that she remained the same size: to be sure, this generally happens when one eats cake, but Alice had got so much into the way of expecting nothing but out-of-the-way things to happen, that it seemed quite dull and stupid for life to go on in the common way.

So she set to work, and very soon finished off the cake.

Wonderland's Masonic Hall Rosicrucianism was a major source of inspiration, and supplier of symbolism, for the highly organized Freemasons. It is not known whether Lewis Carroll himself was a Freemason; he was very diligent in keeping secrets. But we do know he was well acquainted with many high-ranking Freemasons, and from his diaries we know he purchased tickets to Masonic events and public functions. Furthermore, Carroll owned an 1851 edition of Avery Allyn's *A Ritual and Illustrations of Freemasonry Accompanied by Numerous Engravings and a Key to the Phi Beta Kappa*.

Consequently, Carroll was sufficiently familiar with Freemasonry to integrate their symbolism (in a somewhat disguised form) into *Wonderland*. For example, from the perspective of a three-inch Alice standing beneath the Wonderland hall's three-legged glass table with its out-of-reach golden key, we have a challenge comparable (on a grander scale) to the Freemasons' first degree apprentice tracing board—an *aide-mémoire* to the fraternity's symbols and emblems—with its three gigantic pillars (wisdom, strength, beauty) and its out-of-reach golden key hanging from a ladder. Alice looks for "another key ... or at any rate a book of rules for shutting people up like telescopes"—she is much concerned with size and proportion. At the base of the ladder in the Freemasons' tracing board is a book, and with it instruments for measuring and levelling. There are also two blocks of stone—one rough cut, one a

perfect cube.

In the symbolic language of the fraternity, the ladder represents the ascent into the mysteries of Freemasonry. This ascent is achieved through the step-by-step process by which the raw ashlar or rough stone (the apprentice) is transformed into the perfect ashlar—or cubit of cut stone (the adept Alice is going through a similar step-by-step process of learning to gauge measurement and proportion.)

The three female figures in the tracing board are Hope, Faith and Charity (comparable to the three fatal sisters of the prelude poem), the virtues that both Alice and the initiate require to win the golden key. In the centre of the tracing board, above the pillar of wisdom, we see the single most famous symbol of Freemasonry: the All-Seeing Eye. This symbol represents the Great Architect of the Universe. In *Wonderland*, Carroll uses a verbal sleight-of-hand trick to introduce the All-Seeing Eye into Alice's garden.

Alice finds herself too large to enter through the little door, but: "It was as much as she could do, lying down on one side, to look through into the garden with *one eye*." Later, with the Lobster Quadrille, Carroll has her begin to recite the carefully worded first line of a poem: "I passed by his garden, and marked, with *one eye*."

Many of Carroll's poems contain hinting references to the Freemasons and Rosicrucians, secret societies whose language and symbols were intentionally obscure to the uninitiated. "Ode to Damon" has the subtitle "(From Chloe, Who Understands His Meaning)" and ends with: "You'll find no one like me, who can manage to see *Your meaning, you talk so obscurely.*" Compare this with the final lines of the Rosicrucian Catechism: "Why do you people speak so obscurely? So that only the true sons of God may understand me."



Masonic first degree tracing board, painted by Josiah Bowring in 1819.

Chapter 2: The Pool of Tears

"Oh dear, what nonsense I'm talking!"





CURIOUS AND CURIOUSER After failing to reach the golden key on the glass table because she was too small, Alice thought she might remedy the situation by eating the little cake she discovered in a glass box under the table. By so doing she hoped to grow either larger or smaller. In this she succeeded only too well, and to her astonishment telescoped upward to such a height that her head bumped against the ceiling.

Something had gone badly wrong, for as we can see from both John Tenniel's drawing in *Alice's Adventures in Wonderland* and Lewis Carroll's own drawing in *Alice's Adventures Under Ground*, Alice had not just grown far too large but was also wildly elongated and disproportionate. She is so disoriented and confused that she absurdly considers sending postal messages to her feet, which, she notes, are far below her next to the hall's fireplace.

This is a curious detail, as it has frequently been observed over the years that the andirons in the fireplaces of Christ Church's Great Hall are decorated in the shape of maidens' heads with greatly elongated necks. Tenniel's and Carroll's illustrations of the elongated Alice bear a strong resemblance to those posts.



Great Hall andirons: Uncanny resemblance to the image on this section's opener.



Alice attempts to make the best of her new stature. After all, she can now easily retrieve the golden key that will open the little door. However, she immediately recognizes another obstacle: she is far too large to even get her head through the door and into the passageway to the garden.

Frustrated by her inability to solve the logical conundrum of the key, lock and door standing between her and the garden, the nine-foot-tall Alice begins to weep so copiously that she creates a large pool of tears that flows down the hallway. This flood is so great that when she is later reduced to a height of a couple of inches, she nearly drowns in what appears to be a flowing river.



THE POOL OF TEARS.

"Curiouser and curiouser!" cried Alice (she was so much surprised, that for the moment she quite forgot how to speak

good English). "Now I'm opening out like the largest telescope that ever was! Good-bye, feet!" (for when she looked down at her feet, they seemed to be almost out of sight, they were getting so far off). "Oh, my poor little feet, I wonder who will put on your shoes and stockings for you now, dears? I'm sure I shan't be able! I shall be a great deal too far off to trouble myself about you: you must manage the best way you can—but I must be kind to them," thought Alice, "or perhaps they won't walk the way I want to go! Let me see: I'll give them a new pair of boots every Christmas."

And she went on planning to herself how she would manage it. "They must go by the carrier," she thought; "and how funny it'll seem, sending presents to one's own feet! And how odd the directions will look!

After a short time, though, Alice ceases crying and rebukes herself in an odd manner. "'You ought to be ashamed of yourself,' said Alice, 'a great girl like you,' (she might well say this), 'to go on crying in this way!' "Beyond the fact that Alice has tripled in height, why does Carroll have the child chide herself with these words?

"A great girl" makes sense if it is placed in the mythological context of Alice's adventures, and take a hint from the author who—just before Alice's sudden growth—observes that "this curious child was very fond of pretending to be two people." Here, it appears, Alice has taken on the identity of that other "great girl," the great goddess Isis, who is known as "She who weeps," and whose tears are the source of the Nile River.

Alice's right foot, esq.

Hearthrug,

near the Fender,

(with Alice's love).

Oh dear, what nonsense I'm talking!"

Just then her head struck against the roof of the hall: in fact she was now more than nine feet high, and she at once took up the little golden key and hurried off to the garden door.

Poor Alice! It was as much as she could do, lying down on one

side, to look through into the garden with one eye; but to get through was more hopeless than ever: she sat down and began to cry again.

"You ought to be ashamed of yourself," said Alice, "a great girl like you," (she might well say this), "to go on crying in this way! Stop this moment, I tell you!" But she went on all the same, shedding gallons of tears, until there was a large pool all round her, about four inches deep and reaching half down the hall.

After a time she heard a little pattering of feet in the distance, and she hastily dried her eyes to see what was coming. It was the White Rabbit returning, splendidly dressed, with a pair of white kid gloves in one hand and a large fan in the other: he came trotting along in a great hurry, muttering to himself as he came, "Oh! the Duchess, the Duchess! Oh! won't she be savage if I've kept her waiting!" Alice felt so desperate that she was ready to ask help of any one; so, when the Rabbit came near her, she began, in a low, timid voice, "If you please, sir—" The Rabbit started violently, dropped the white kid gloves and the fan, and skurried away into the darkness as hard as he could go.

Alice took up the fan and gloves, and, as the hall was very hot, she kept fanning herself all the time she went on talking: "Dear, dear! How queer everything is to-day! And yesterday things went on just as usual. I wonder if I've been changed in the night? Let me think: was I the same when I got up this morning? I almost think I can remember feeling a little different. But if I'm not the same, the next question is 'Who in the world am I?' Ah, *that's* the great puzzle!" And she began thinking over all the children she knew that were of the same age as herself, to see if she could have been changed for any of them.

This dual personality also makes sense of why, a little later, Alice is feeling literally not herself—she wonders if she has changed into one of her friends—and why "her voice sounded hoarse and strange." And why, as the Great Goddess, her recitation in a séance-like voice transforms an innocent poem about a busy bee into a sinister rhyme about a crocodile in "the waters of the Nile." And perhaps it is also a reminder that the

source of the entire fairy tale is a journey on the river Isis.

Alice's deliberations are interrupted by the sudden appearance of the dapper but somewhat harried White Rabbit. When Alice asks for help, the startled animal drops its white gloves and fan and dashes off. Alice picks them up and begins to fan herself as she ponders her predicament.

Alice's growth in physical size appears to provoke her into embracing larger thoughts and ideas. Carroll soon has her puzzling over a number of riddles and conundrums. Yet all of these ultimately seem to relate to one large question: "Who in the world am I?' Ah, *that's* the great puzzle!" It is, of course, the great puzzle that has occupied the minds of humans since the dawn of time.

Alice had already immersed herself in the deepest of metaphysical waters when she found herself shrinking down to nearly nothing and worried about "going out altogether, like a candle. I wonder what I should be like then?" Alice's musings on the candle flame are as simple and profound as those of all the great philosophers and mystics who have ever meditated on the existence and nature of the human soul. Where does the flame go when it is blown out? What becomes of the flame of the soul after life is extinguished?

"I'm sure I'm not Ada," she said, "for her hair goes in such long ringlets, and mine doesn't go in ringlets at all; and I'm sure I can't be Mabel, for I know all sorts of things, and she, oh, she knows such a very little! Besides, *she's* she, and *I'm* I, and—oh dear, how puzzling it all is! I'll try if I know all the things I used to know. Let me see: four times five is twelve, and four times six is thirteen, and four times seven is—oh dear! I shall never get to twenty at that rate! However, the Multiplication-Table doesn't signify: let's try Geography. London is the capital of Paris, and Paris is the capital of Rome, and Rome—no, *that's* all wrong, I'm certain! I must have been changed for Mabel! I'll try and say 'How doth the little—'," and she crossed her hands on her lap as if she were saying lessons, and began to repeat it, but her voice sounded hoarse and strange, and the words did not come the same as they used to do:—

"How doth the little crocodile Improve his shining tail, And pour the waters of the Nile On every golden scale!

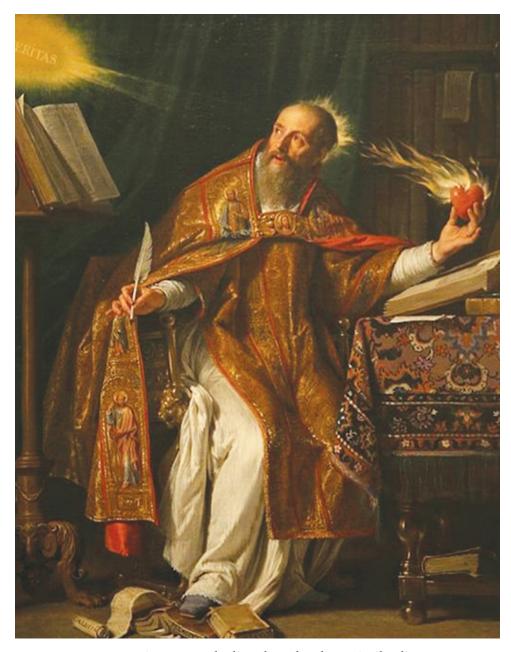
How cheerfully he seems to grin, How neatly spread his claws, And welcome little fishes in, With gently smiling jaws!"

"I'm sure those are not the right words," said poor Alice, and her eyes filled with tears again as she went on, "I must be Mabel after all, and I shall have to go and live in that poky little house, and have next to no toys to play with, and oh, ever so many lessons to learn! No, I've made up my mind about it; if I'm Mabel, I'll stay down here! It'll be no use their putting their heads down and saying 'Come up again, dear!' I shall only look up and say 'Who am I then? Tell me that first, and then, if I like being that person, I'll come up: if not, I'll stay down here till I'm somebody else'—but, oh dear!" cried Alice, with a sudden burst of tears, "I do wish they would put their heads down! I am so very tired of being all alone here!"

Alice comes to understand that memory is a critical aspect of identity. Consequently she attempts to orient herself by trying to remember rules of grammar, historical and geographical facts, logical arguments, mathematical tables and recitations.

Mentally exhausted, she continues to puzzle over the question of her identity. She is so frustrated, she wishes someone would simply tell her who she is, "and if I like being that person, I'll come up: if not, I'll stay down here till I'm somebody else."

But then Alice discovers she is once again fluctuating in size. She has now become so small that she finds the White Rabbit's little gloves have somehow slipped onto her own hands. Measuring herself against the height of the glass table, she estimates she is now about two feet tall.



St. Augustine: He and Alice thought along similar lines.

ON MEMORY AND TIME

Alice becomes "curiouser and curiouser" when she experiences a separation of mind and body and grows so rapidly that her feet "seemed to be almost out of sight, they were getting so far off."

Alice's experience is reminiscent of an observation by the first

great Christian philosopher, St. Augustine of Hippo (ad 354-430). In Book XI of his *Confessions* (ad 398), Augustine asked: "When the mind sets itself before itself to express what it sees, does the mind see part of itself with some other part of itself as we see parts of our body with another part of it, the eyes, by putting those parts in the eyes' line of sight?"

St. Augustine was the bishop of Hippo in North Africa during the last days of the Roman Empire. Lewis Carroll knew the *Confessions* intimately, in both Latin and from the 1838 English translation by Edward Bouverie Pusey—his mentor and his father's college friend. Indeed, Augustine's practical amalgamation of scientific truth with religious belief (as well as his rejection of eternal damnation) was influential in the formation of Carroll's own moral philosophy.

Let us compare Alice's thoughts during her descent down the rabbit-hole with those of Augustine in his *Reflections on Memory and Time*, where he speaks of himself as a man who when he "plunges into the depths of his memory," finds "it is vast and frightening and yet it is only his own mind, his self." Alice similarly plunges into the depths of her own mind, albeit in a dream.

Alice's rabbit-hole is described as a dark and "very deep well" lined with all manner of things: "bookshelves and cupboards ... maps and pictures.... Down, down, down. Would the fall never come to an end?...I must be getting somewhere near the centre of the earth."

This is similar to Augustine's "depths" with their "uncountable expanses, hollows, caverns uncountable filled with uncountable things of all types ... darting this way and that" as he finds himself "plunging down as far as he can go, and reaching no bottom..."

All this, and in a passage reminiscent of Alice's question, "Do cats eat bats, do bats eat cats?" Augustine observes that "Memories are in motion, elude him, flying in unbidden like bats in a cave."

Once in Wonderland's hall, Alice's confusion is comparable to Augustine's: "What is my makeup? A divided one, shifting, fierce in scale." Just as Alice can't make up her mind whether she is herself or somebody else, or what she felt and where and when she did it, Augustine says: "This is where I bump up against myself, when I

call back what I did, and where, and when, and how I felt when I was doing it."

Augustine, like Alice, understands that "memory is a guide to conduct," and consequently both attempt to orient themselves by way of memories. Alice becomes especially perplexed by the fact that she can positively remember that she has forgotten things she used to remember.

Augustine ponders exactly the same paradox: "I cannot understand myself when I am remembering, yet I cannot say anything about myself without remembering myself. And what am I to make of the fact that I am positive that I remember having forgotten?"

Both tie themselves up in mental knots. Augustine asks himself, "Who could say or think anything sillier?", and concludes: "... [this is] the purest nonsense." Alice reprimands herself with: "Oh dear, what nonsense I'm talking."

Reflections on Memory and Time is the earliest recorded meditation on our ability to travel in "mental time"—an ability which is at the heart of human consciousness and cognition.

In this dream-world dimension of shifting realities, as in the waking world, Alice arrives at something akin to Augustine's conclusion in his *Truth in Religion*: "Even if I am in error, it is true that I have to exist in order to be making the error."

Or as Augustine more succinctly stated in *City of God*: "Even if in error, I am." It took another twelve hundred years of pondering to produce the slightly more precise philosophical starting point of René Descartes: "I think, therefore I am."

For Alice, as for any philosophy student, all else will have to follow logically from that beginning. And when doing so as Augustine advises, it is best to "house yourself in the humble person's heart." Or, as Carroll has done in *Wonderland*, in the heart of a child.

In attempts to recover aspects of her identity through memory, Alice tests herself with multiplication tables. But when she begins, she finds to her astonishment that the one she's reciting is entirely foreign to her: "Let me see: four times five is twelve, and four times six is thirteen, and four times seven is—oh dear! I shall never get to twenty at that rate!"

At first glance, this example of Wonderland mathematics doesn't seem very promising; as Alice herself observes, "The Multiplication-Table doesn't signify." But actually, it signifies a great deal about the way Carroll's mind worked. Alexander Taylor, in his 1952 biography of Carroll, *The White Knight*, was the first critic to take Alice's multiplication table seriously.

"Mathematicians," he wrote, "will have no difficulty in recognizing this as a problem based on scales of notation, but even the non-mathematical should make an effort to follow the explanation I propose to give, since this is proof positive that Dodgson was ... doing something quite different from what he was pretending to do in this apparently guileless story for children."

What was the explanation? Let's start with what Alexander meant by "scales of notation." In our everyday use of numbers we use a scale of notation (or base unit) of 10, in which 52, for instance, is a numerical notation for $(5 \times 10) + 2$. However, alternative scales of notation can be constructed using other base numbers. For example, in our everyday (base 10) arithmetic, $4 \times 5 = 20$ and $4 \times 6 = 24$.

However, the Wonderland table begins $4 \times 5 = 12$; $4 \times 6 = 13$; 4×7 ...This is correct if we use different base numbers for each multiplication level—namely, bases 18, 21 and 24, respectively. So we have: $4 \times 5 = 20$ —but in base 18 it equals $(1 \times 18) + 2$, which is written as 12

 $4 \times 6 = 24$ —but in base $21 = (1 \times 21) + 3$, which is written as 13 $4 \times 7 = 28$ —but in base $24 = (1 \times 24) + 4$, which is written as 14

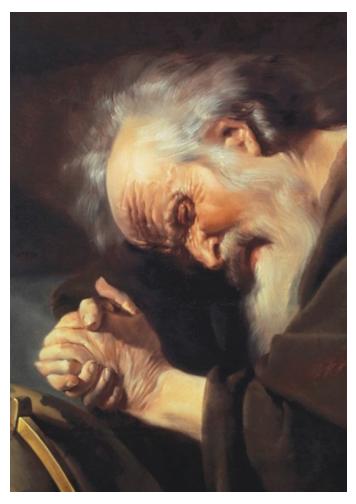
This is a perfectly sound multiplication system so long as we continue to increase the base number by 3 each time.

 $4 \times 8 = 32$ —but in base $27 = (1 \times 27) + 5$, which is written as 15 $4 \times 9 = 36$ —but in base $30 = (1 \times 30) + 6$, which is written as 16 $4 \times 10 = 40$ —but in base $33 = (1 \times 33) + 7$, which is written as 17 $4 \times 11 = 44$ —but in base $36 = (1 \times 36) + 8$, which is written as 18 $4 \times 12 = 48$ —but in base $39 = (1 \times 39) + 9$, which is written as 19

So far, so good. The next step would seem to be $4 \times 13 = 20$. However, the next base number is 42—and this number wrecks the logical progression of Wonderland's table: $4 \times 13 = 52$ —but in base 42 it equals $(1 \times 42) + 10$, which is written 1X, because in base 42, X is the symbol for 10. Consequently, Alice is entirely correct in her belief that she "shall never get to twenty at that rate!" The only way base 42 could produce a result of 20 would be to jump to $4 \times 21 = 84$. But in base 42, that would equal $(2 \times 42) + 0$, which is written as 20. However, this calculation destroys the validity of the table.

Alexander Taylor saw the Wonderland multiplication table as "proof positive" of what Lewis Carroll was up to mathematically in the book. Scales of notation were "exactly the kind of problem to interest Dodgson"; indeed, a contemporary of Carroll's at Oxford noted his penchant for "testing the veracity of multiplication tables."

Taylor was the first to detect the existence of this particular Wonderland mathematical riddle (some five decades after the author's death), and commented that Carroll "never told anybody what he had done and he did not refer to it in his diary. Nevertheless, it can hardly be a coincidence; nor could he invent such a problem in a kind of day-dream, without knowing what he was doing."



He went with the flow: Heraclitus, the weeping philosopher.

DOCTRINE OF FLOW Swept away in the flood of tears, Alice encounters a truculent Mouse in these salty waters. The most likely candidate for a philosophical Mouse would be Heraclitus of Ephesus (535–475 BC), known as "the weeping philosopher" and the subject of a famous Greek epigram: "Among the wise ... Heraclitus was overtaken by tears."

So both the Mouse and Heraclitus are "overtaken by tears"—which seems appropriate enough when you consider that Heraclitus's most famous philosophical theory was the Doctrine of Flow. This doctrine is famously stated in the motto "You can never step twice into the same river." Or more precisely, "We both step and do not step in the same rivers. We are and are not."

Also known as the Doctrine of Flux, it maintains that the one thing that is eternal is that all things flow and transform—which is exactly what happens in Wonderland. As Alice is caught up in the flow of her tears, the landscape and entities around her constantly change and transform.

The Mouse's bad-tempered, quarrelsome nature is in keeping with Heraclitus's reputation for melancholia and misanthropy, and the Mouse's conflict with cats possibly relates to the philosopher's belief that "all things come into being by conflict of opposites."

And the Mouse's disdain for Alice is a match for Heraclitus's disdain for most of the human race, which he believed (quite accurately in the case of the dreaming Alice) "live like sleep walkers, in a dream world of their own."

This interpretation may also explain the Mouse's extraordinary leap from the flow of tears. Heraclitus believed it was the philosopher's task to examine life in such a way that its "underlying meaning can leap up—like the solution of a riddle."

The episode in which the Mouse attempts to dry the other creatures after they emerge from the Pool of Tears relates to Heraclitus's emphasis on the importance of the condition of the soul. He believed that worldly pleasures made the soul moist and helpless like a drunken man, but when the soul was dry, it became rational and virtuous.

Like Heraclitus's lectures, the Mouse's lessons are so dry that his bored audience remains entirely uninterested, and "as wet as ever."

Nor does it end there. Something continues to make Alice rapidly and exponentially smaller. With only moments to spare, a very frightened Alice discovers the White Rabbit's fan is responsible for this chilling effect on her size. She drops it just in time to stop herself from entirely vanishing.

Slowly, Alice is coming to understand that—like the food and drink in Wonderland—many emblematic objects also possess certain powers. As white rabbits are sometimes used as magicians' props, it should not be such a surprise that the Rabbit's white gloves and fan have transforming

powers.

As she said this she looked down at her hands, and was surprised to see that she had put on one of the Rabbit's little white kid gloves while she was talking. "How can I have done that?" she thought. "I must be growing small again." She got up and went to the table to measure herself by it, and found that, as nearly as she could guess, she was now about two feet high, and was going on shrinking rapidly: she soon found out that the cause of this was the fan she was holding, and she dropped it hastily, just in time to avoid shrinking away altogether.

"That was a narrow escape!" said Alice, a good deal frightened at the sudden change, but very glad to find herself still in existence. "And now for the garden!" And she ran with all speed back to the little door; but, alas! the little door was shut again, and the little golden key was lying on the glass table as before, "and things are worse than ever," thought the poor child, "for I never was so small as this before, never! And I declare it's too bad, that it is!"

As she said these words her foot slipped, and in another moment, splash! she was up to her chin in salt water. Her first idea was that she had somehow fallen into the sea, "and in that case I can go back by railway," she said to herself. (Alice had been to the seaside once in her life, and had come to the general conclusion that, wherever you go to on the English coast, you find a number of bathing machines in the sea, some children digging in the sand with wooden spades, then a row of lodging houses, and behind them a railway station.) However, she soon made out that she was in the pool of tears which she had wept when she was nine feet high.

Just when it seems to the tiny Alice that her circumstances cannot get worse, she slips into a flood of tears and is carried down the hall and beyond. The entire "Pool of Tears" chapter is a characteristic Carrollian charade: an elaborate tableau built on the cliché "drowning in one's tears." It is a typical Lewis Carroll joke to amuse children with a literal interpretation of a common expression or figure of speech.

But it is more than a joke. We are also told that Alice's "first idea was

that she had somehow fallen into the sea." This thought is followed by a flight of fancy involving her memories of railway journeys to the seaside, where she had observed the very Victorian ritual of sea-bathing with the aid of "bathing machines"—changing rooms on wheels for overly modest swimmers.

SIZE AND TEARS In "The Pool of Tears," Alice despairs over her constantly fluctuating size. In this, Carroll has created a kind of charade whose answer is "Size and Tears." This is the name of a poem he wrote during the time (1863) he was composing *Alice's Adventures in Wonderland*. The title is a pun directly linking "sighs and tears" to "size and tiers," a mathematician's pun that suggests what Isaac Newton called fluents and fluxions—an early form of calculus used in solving problems in dynamics.

Newton's fluents and fluxions—terms for functions and their derivatives—are more obviously stated as "rates of change." Like calculus, Newton's fluents and fluxions can be described as a dynamic combination of algebra and geometry that measures curves and solves problems that static mathematics can't because things are constantly changing (as Alice would say) "at any rate."

Converting *tears* to *tiers* is a typical Carrollian pun. A *tier* is a common term for levels in the step-by-step process of teaching mathematics. And as in calculus, the minutely sliced units of measurement that change from one infinitesimal moment to the next can be described as tiers.

This process is also descriptive of Alice's constant changes from one moment to the next; that is to say, she is caught up in the fluents and fluxions of size and tiers—or, stated another way, a flood of sighs and tears.

This sighs/size and tears/tiers pun is, as we shall see later, also employed by Carroll in the sighs and tears of the Mock Turtle. Another example is in his poem "Melancholetta" (1862), in which he describes a weeping heroine in a theatre who looks up at the tiers of seats: "Her pensive glances wandered wide *From orchestra to rafter— 'Tier upon tier!'* she said, and sighed; / And silence followed



Carroll's poem "Melancholetta" was based on Dürer's allegorical engraving Melencolia I (1514).

"I wish I hadn't cried so much!" said Alice, as she swam about, trying to find her way out. "I shall be punished for it now, I suppose, by being drowned in my own tears! That will be a queer thing, to be sure! However, everything is queer to-day."

Just then she heard something splashing about in the pool a little way off, and she swam nearer to make out what it was: at first she thought it must be a walrus or hippopotamus, but then she remembered how small she was now, and she soon made out that it was only a mouse that had slipped in like herself.

"Would it be of any use, now," thought Alice, "to speak to this mouse? Everything is so out-of-the-way down here, that I should think very likely it can talk: at any rate, there's no harm in trying." So she began: "O Mouse, do you know the way out of this pool? I am very tired of swimming about here, O Mouse!" (Alice thought this must be the right way of speaking to a mouse: she had never done such a thing before, but she remembered having seen in her brother's Latin Grammar, "A mouse—of a mouse—to a mouse—a mouse—O mouse!") The mouse looked at her rather inquisitively, and seemed to her to wink with one of its little eyes, but it said nothing.

Viewed in the context of the ancient Eleusinian Mysteries, Alice appears to have diminished not just in size but in status—from that of the presiding Great Goddess to that of one of her initiates, who must purify herself through ritual sea-bathing.

While swimming in the Pool of Tears, Alice hears something enormous splashing about in the water with her. Forgetting how small she has become, she is surprised to discover the creature is not a hippopotamus but a mouse. Alice attempts to make polite conversation, but having never actually spoken to a mouse before, she has great difficulty finding the proper way to address the animal. Failing to get its attention in English, she then employs snatches of what little she knows of Latin and French.

There are a number of private jokes here (and in the beginning of the following chapter) that have kept Carrollian scholars busy over the years. They relate to children's lessons and books that would have been familiar to the Liddell girls. Martin Gardner credits Selwyn Goodacre for discovering the Latin grammar book belonging to Alice's older brother Harry: the 1840 *Comic Latin Grammar*, written by Percival Leigh, a contributor to the weekly humour magazine *Punch*. It was a book owned by Carroll. Only one noun in the book is declined in full. It is not, however, *mus*, the Latin word for "mouse," but rather interestingly enough *musa*, the Latin for "muse."

Hugh O'Brien appears to have identified Alice's French lesson book, with its initial "chatte"-up line. Originally published in 1804, the book was rather ponderously entitled *La Bagatelle: Intended to introduce children of three or four years old to some knowledge of the French Language.* And Roger Lancelyn Green provides the solution to the origin of the Mouse's dry-as-dust history lesson (at the opening of chapter 3): it proves to be directly quoted from Havilland Chepmell's 1862 *Short Course of History.*

The Chepmell history was exactly the kind of boring lessons-by-rote book that Carroll hated to see inflicted on children. The Liddell children were expected to study it, though, and it may provide a hint to the Mouse's identity. For certainly, the person in charge of inflicting these prescribed lesson books on the sisters was the children's governess, Miss Prickett.

"Perhaps it doesn't understand English," thought Alice. "I daresay it's a French mouse, come over with William the Conqueror." (For, with all her knowledge of history, Alice had no very clear notion how long ago anything had happened.) So she began again: "Oú est ma chatte?" which was the first sentence in her French lesson-book. The Mouse gave a sudden leap out of the water, and seemed to quiver all over with fright. "Oh, I beg your pardon!" cried Alice hastily, afraid that she had hurt the poor animal's feelings. "I quite forgot you didn't like cats."

"Not like cats!" cried the Mouse, in a shrill, passionate voice. "Would *you* like cats if you were me?"

In the *Alice's Adventures Under Ground* version of the fairy tale, it is extremely likely that Lewis Carroll had Mary Prickett (1832–1920) in mind for the character of the Mouse. The daughter of the Trinity College butler, Prickett was twenty-six and unmarried when she became the Liddell children's governess. Her life appeared to be entirely taken up with their care and education. And then, at the age of forty, Mary Prickett—remarkably, for the times—changed her life completely. She married a wealthy Oxford wine merchant, and for the next five decades was manager and proprietor of The Mitre inn, an historic seventeenth century coach-house on Oxford High Street.



Mighty Mouse: Mary Prickett changed her life.

Necessarily a rather strict and formal governess, Miss Prickett was also believed to be Carroll's model for the Red Queen in *Through the Looking-Glass*. Carroll described the Red Queen in his "'Alice' on the Stage" as "the concentrated essence of all governesses!" In the first edition of *Through the Looking-Glass*, in "The Garden of Live Flowers" chapter, the Rose (Rhoda, one of the younger Liddells) says of the Red Queen: "She's one of the thorny kind." This is believed to be a private joke referring to "Pricks," the children's affectionate nickname for their governess.

"Well, perhaps not," said Alice in a soothing tone: "don't be angry about it. And yet I wish I could show you our cat Dinah: I think you'd take a fancy to cats if you could only see her. She is such a dear quiet thing," Alice went on, half to herself, as she swam lazily about in the pool, "and she sits purring so nicely by the fire, licking her paws and washing her face—and she is such a nice soft thing to nurse—and she's such a capital one for catching mice—oh, I beg your pardon!" cried Alice again, for this time the Mouse was bristling all over, and she felt certain it must be really offended. "We won't talk about her any more if you'd rather not."

"We indeed!" cried the Mouse, who was trembling down to the

end of his tail. "As if I would talk on such a subject! Our family always *hated* cats: nasty, low, vulgar things! Don't let me hear the name again!"

Nonetheless, in Wonderland, Alice's attempts to strike up a conversation with the Mouse fail miserably. This is largely because she isn't quite able to see the world from the Mouse's perspective. After her first gaffe with "*ma chatte*," she prattles on about how wonderfully Dinah the cat is at catching mice and how valuable a neighbour's dog is for its ability to kill rats. Later, in the company of birds, Alice will again create a stir when she proudly describes Dinah's prowess in the slaughter of birds.

Dinah was the actual name of one of the Liddell family's two tabby cats. The other was called Villikins. The cats' names come from "Villikins and His Dinah," one of the most popular comic songs of the mid-Victorian period. Variations of this burlesque of an early nineteenth-century tragic folk song about star-crossed lovers was adapted many times: as "Sweet Betsy from Pike" in the U.S., "Dinki-di" in Australia and "The Anti-Confederation Song" in Newfoundland.

"I won't indeed!" said Alice, in a great hurry to change the subject of conversation. "Are you—are you fond—of—of dogs?" The Mouse did not answer, so Alice went on eagerly: "There is such a nice little dog near our house I should like to show you! A little bright-eyed terrier, you know, with oh, such long curly brown hair! And it'll fetch things when you throw them, and it'll sit up and beg for its dinner, and all sorts of things—I can't remember half of them—and it belongs to a farmer, you know, and he says it's so useful, it's worth a hundred pounds! He says it kills all the rats and—oh dear!" cried Alice in a sorrowful tone, "I'm afraid I've offended it again!" For the Mouse was swimming away from her as hard as it could go, and making quite a commotion in the pool as it went.

So she called softly after it, "Mouse dear! Do come back again, and we won't talk about cats or dogs either, if you don't like them!" When the Mouse heard this, it turned round and swam slowly back to her: its face was quite pale (with passion, Alice thought), and it

said in a low trembling voice, "Let us get to the shore, and then I'll tell you my history, and you'll understand why it is I hate cats and dogs."

It was high time to go, for the pool was getting quite crowded with the birds and animals that had fallen into it: there was a Duck and a Dodo, a Lory and an Eaglet, and several other curious creatures. Alice led the way, and the whole party swam to the shore.

Burlesques like "Villikins and His Dinah" were very much in vogue on the London stage at the time. Carroll could parody with the best of them, as he shows throughout *Wonderland* and *Looking-Glass* in his send-ups of well-known poems, rhymes and songs. He also published comic versions of serious works by such contemporary giants as Wordsworth, Tennyson and Longfellow.

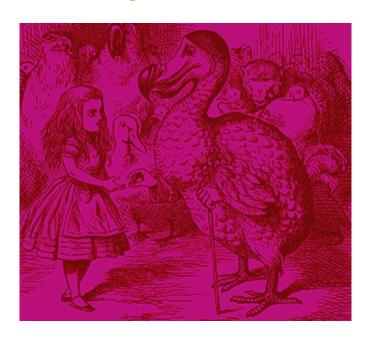
Dinah is called upon a number of times in *Wonderland*. Undoubtedly, this was because the real Alice—like the *Wonderland* Alice—loved to chat about her pet. Dinah is mentioned during the fall down the rabbithole, in the Pool of Tears, in the Caucus-race, in the White Rabbit's house and even in the opening scene of *Through the Looking-Glass*, where she is the mother of two kittens, Kitty and Snowdrop, who also double as the Red and White Queens in the Looking-Glass chess game.

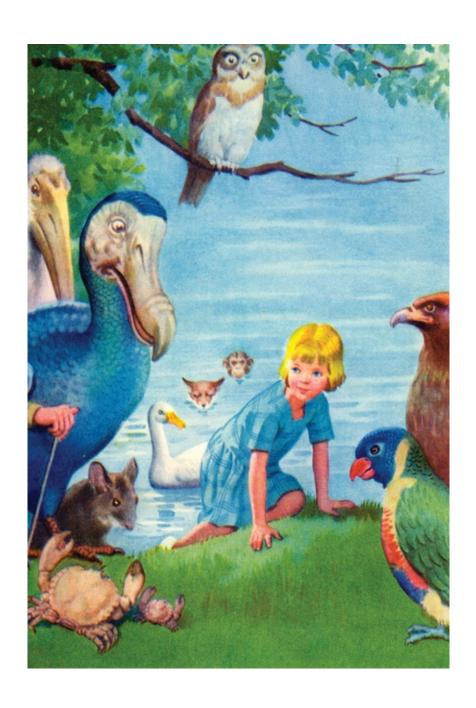
At the end of "The Pool of Tears," a repentant Alice promises not to bring up the subject of the offending carnivorous pets again. She is rejoined by the Mouse, and a number of other creatures, as they swim toward the shore.



Chapter 3: A Caucus-Race and a Long Tale

"I move that the meeting adjourn, for the immediate adoption of more energetic remedies—"





THE DODO AND THE DODGSON On the bank of the Pool of Tears, Alice finds herself emerging with a variety of birds and animals from a kind of primordial soup. They are somewhat disgruntled as they discuss how they might best dry out. Alice begins chatting with two of the birds and has the strangest feeling that "she had known them all her life." There are hints of Darwinian evolution here (in one of Tenniel's engravings an ape can be seen, and in Carroll's own drawings in the *Under Ground* manuscript, a pair of monkeys swim in the Pool of Tears), but as the creatures all seem capable of speech, the scene is perhaps also meant as a parody of the spiritualist craze of the time. Mediums often claimed they could communicate with the spirits of departed relatives through household pets such as dogs and parakeets.

A CAUCUS-RACE AND A LONG TALE.

They were indeed a queer-looking party that assembled on the bank—the birds with draggled feathers, the animals with their fur clinging close to them, and all dripping wet, cross, and uncomfortable.

The first question of course was, how to get dry again: they had a consultation about this, and after a few minutes it seemed quite natural to Alice to find herself talking familiarly with them, as if she had known them all her life. Indeed, she had quite a long argument with the Lory, who at last turned sulky, and would only say, "I am older than you, and must know better." And this Alice would not allow without knowing how old it was, and, as the Lory positively refused to tell its age, there was no more to be said.

After some discussion, the Mouse decides on the best way for everyone to dry out. With the strict authority of a schoolteacher, he demands silence and proceeds to deliver the driest of history lessons.

As we have discovered, the Mouse's lecture on the Norman kings is a direct quotation from a very boring lesson book of the time. Although the lecture is painfully dry, it does nothing to dry the wet animals, which prompts impatient remarks from the Lory, Duck, Eaglet and

ultimately the Dodo.

All these creatures have real-life identities that would be easily recognized by Alice and her sisters. Indeed, Alice is quite correct in her impression that "she had known them all her life." Two were her sisters transformed into birds: LORINA CHARLOTTE LIDDELL (1849–1930) is the Lory—that is, a lorikeet, or small parrot—while the younger EDITH LIDDELL (1854–1876) is the Eaglet.

Like the "golden afternoon" prelude poem and "The Pool of Tears," this chapter contains several teasing private jokes meant for the Liddell sisters. The Lory-Lorina's insistence that "I am older than you, and must know better" is reminiscent of her portrayal in the poem as "Imperious Prima" who "flashes forth Her edict," while the Eaglet-Edith's curt interruption of the Dodo is entirely consistent with "Tertia" who "interrupts the tale Not more than once a minute."



Eaglet-Edith: Interrupted the tale not more than once a minute.

At last the Mouse, who seemed to be a person of authority among them, called out, "Sit down, all of you, and listen to me! *I'll* soon make you dry enough!" They all sat down at once, in a large ring, with the Mouse in the middle. Alice kept her eyes anxiously fixed on it, for she felt sure she would catch a bad cold if she did not get dry very soon.

"Ahem!" said the Mouse with an important air, "are you all ready? This is the driest thing I know. Silence all round, if you please! 'William the Conqueror, whose cause was favoured by the pope, was soon submitted to by the English, who wanted leaders, and had been of late much accustomed to usurpation and conquest. Edwin and Morcar, the earls of Mercia and Northumbria—' "

"Ugh!" said the Lory, with a shiver.

"I beg your pardon!" said the Mouse, frowning, but very politely. "Did you speak?"

"Not I!" said the Lory hastily.



Lory-Lorina: "I am older than you, and must know better."

If further evidence were needed, we might wish to examine the earlier *Alice's Adventures Under Ground* version of the story. In it is a passage left out of *Alice's Adventures in Wonderland* wherein Carroll makes sure that the sisters recognize themselves in the guise of the two birds. This passage has Alice talking "to herself again as usual: 'I do wish some of them had stayed a little longer! and I was getting to be such friends with them—really the Lory and I were almost like sisters! and so was that dear little Eaglet!'

The other two birds would also be recognizable to the three sisters. The Duck was the Reverend Robinson Duckworth and the Dodo was the Reverend Charles Dodgson himself. We have proof of this with a signed copy of the 1886 facsimile edition of *Alice's Adventures Under Ground* that Carroll inscribed with a dedication to Robinson Duckworth: "From the Dodo to the Duck."

ROBINSON DUCKWORTH (1834-1911) was a friend and colleague of

Dodgson's at Oxford. He was a Fellow of Trinity College who went on to a distinguished career in the church. He eventually became royal chaplain to two monarchs, Queen Victoria and Edward VII. During the *Wonderland* years, he was a famously fine ecclesiastic singer who often sang to the Liddell sisters on their expeditions with Dodgson. This is acknowledged in the *Under Ground* version, in a passage in which Alice comments: "How nicely the Duck sang to us as we came along through the water." Ducks are not generally known for their fine singing voices, but the Duckworth proved to be the exception.

"I thought you did," said the Mouse. "—I proceed. 'Edwin and Morcar, the earls of Mercia and Northumbria, declared for him; and even Stigand, the patriotic archbishop of Canterbury, found it advisable—' "

"Found what?" said the Duck.

"Found *it*," the Mouse replied rather crossly: "of course you know what 'it' means."

"I know what 'it' means well enough, when I find a thing," said the Duck: "it's generally a frog or a worm. The question is, what did the archbishop find?"

The Mouse did not notice this question, but hurriedly went on, "—found it advisable to go with Edgar Atheling to meet William and offer him the crown. William's conduct at first was moderate. But the insolence of his Normans—' How are you getting on now, my dear?" it continued, turning to Alice as it spoke.

"As wet as ever," said Alice in a melancholy tone: "it doesn't seem to dry me at all."



Robinson Duckworth: Dodgson the Dodo acknowledged him as the Duck.

THE OXFORD DODO The Oxford University Museum's Dodo was in Carroll's time believed to be the only surviving relic of this famously extinct bird. The flightless Dodo was the world's largest member of the pigeon family: a giant dove with the weight of two large domestic turkeys. It was first recorded in 1598 by Dutch sailors, who called it the Dodoor because it appeared to be a giant version of the Dodaer, or Dutch little grebe.

The Oxford Dodo was brought to London live from its native Mauritius sometime before 1638. It was exhibited in a private house in Lincoln's Inn Fields. Upon its demise, it was stuffed and afterwards acquired by the naturalist John Tradescant for his "cabinet of curiosities." By the 1680s, the Dodo was extinct, and the Oxford Dodo was a unique museum specimen.

Eventually, Tradescant's curiosities were integrated into the collection of the antiquarian, Rosicrucian and Freemason Elias Ashmole. This collection became the Ashmolean Museum and was donated to Oxford University. Preservation techniques of the time were not sophisticated, and by 1755 the specimen had deteriorated to such an extent that only the skull, beak and a foot along with some skin and feather samples were retained by the curators of the Ashmolean.

These remains of the Oxford Dodo—along with the iconic 1651

Flemish painting of the bird by Jan Savery—were transferred to the newly constructed Oxford University Museum of Natural History sometime after 1858. That new museum's director and curator was none other than Sir Henry Acland, Oxford's Regius Professor of Medicine and real-life model for the White Rabbit.



The Dodo: Extinct since the 1680s and Carroll's favourite bird.

ZENO'S PARADOX On the philosophical level, the Dodo was the ancient Greek, ZENO of ELEA (490–430 BC). Zeno's most famous conundrum is known as the paradox of Achilles and the Tortoise. With absurd logic, this argument "proves" that Achilles (the world's fastest man) can never overtake the tortoise, which has been given a modest head start in a race. When the tortoise has reached a given point, a, Achilles starts. But by the time Achilles reaches a, the tortoise has already moved on beyond to point b. And by the time Achilles reaches b, the tortoise has moved on to point c. Since this process continues on infinitely, Achilles can never overtake the tortoise.

Zeno's argument is based on the assumption that you can

infinitely divide space. It is both absurd and theoretically logical, so long as one does not take into account the factor of time. Mathematically, however, the resolution of the paradox had to await the discovery of calculus and the proof that infinite geometric series can converge.

In *Wonderland*, the Dodo gives instructions on how to run a Caucus-race. This is a send-up of the race of Achilles and the Tortoise that is even more absurd than Zeno's race: it is a race with no rules and no fixed racetrack. It can begin or end whenever the participants wish, and when the Dodo calls time, all are declared winners and all are awarded prizes.



Zeno: The Greek philosopher still puzzles us with his paradoxes.

Zeno's paradoxes were examples of a method of logical proof known as the *reductio ad absurdum*—meaning to reduce to the absurd—a method of refuting a premise by showing that it leads to an absurdity. This was known as the "destructive" method of argument and is employed by Carroll in absurd dialogues (to great comic effect) throughout *Wonderland*.

As an inventor of paradoxes himself, and a lover of the absurd, Carroll's favourite philosopher was Zeno, and the Dodo was his favourite bird. Over the years, Carroll would construct scores of other paradoxes to puzzle logicians, but the best known today is an infinite-series reversal of Zeno's most famous paradox.

Carroll's paradox was entitled "What the Tortoise Said to Achilles" and has been seriously pondered by Bertrand Russell and several other twentieth-century philosophers. It is also the central focus of Douglas Hofstadter's remarkable book *Gödel, Escher, Bach:* An Eternal Golden Braid—A metaphorical fugue on minds and machines in the spirit of Lewis Carroll.

The transformation of Robinson Duckworth to the Duck is obvious enough, but that of Dodgson himself into the Dodo is a little more obscure. The Liddell children on a number of occasions visited the newly opened Oxford University Museum of Natural History, which at the time housed the only known relics of the famously extinct dodo of Mauritius. While in the museum, the Liddells would certainly have been shown the seventeenth-century Flemish painting of a dodo by Jan Savery, which was the model for Tenniel's drawings of the Dodo in *Wonderland*.

The real reason for Dodgson's becoming the Dodo could be revealed only through knowledge of a private self-mocking joke shared with the Liddell children. Though Dodgson suffered from a nervous stutter that made him a reluctant public speaker, he was seldom afflicted when in the relaxed company of children. Nonetheless, the Liddell girls would frequently have heard him nervously introduce himself on public occasions as Mr. Do-Do-Dodgson. And so we have the origin of the Dodo.

"In that case," said the Dodo solemnly, rising to its feet, "I move that the meeting adjourn, for the immediate adoption of more energetic remedies—"

"Speak English!" said the Eaglet. "I don't know the meaning of half those long words, and, what's more, I don't believe you do either!" And the Eaglet bent down its head to hide a smile: some of the other birds tittered audibly.

"What I was going to say," said the Dodo in an offended tone, "was, that the best thing to get us dry would be a Caucus-race."

"What is a Caucus-race?" said Alice; not that she wanted much to

know, but the Dodo had paused as if it thought that *somebody* ought to speak, and no one else seemed inclined to say anything.

"Why," said the Dodo, "the best way to explain it is to do it." (And, as you might like to try the thing yourself, some winter-day, I will tell you how the Dodo managed it.)

First it marked out a race-course, in a sort of circle, ("the exact shape doesn't matter," it said,) and then all the party were placed along the course, here and there. There was no "One, two, three, and away," but they began running when they liked, and left off when they liked, so that it was not easy to know when the race was over. However, when they had been running half an hour or so, and were quite dry again, the Dodo suddenly called out "The race is over!" and they all crowded round it, panting, and asking, "But who has won?"

What's more, the thirty-something Reverend Dodgson always tended to see himself as elderly (compared to six-to twelve-year-olds) and rather set in his ways, like the extinct bird. Furthermore, he certainly identified with the Wonderland Dodo with his walking stick who was the creator of original games. For indeed, Dodgson often carried a walking stick and delighted in inventing and organizing games for children.

The expedition that inspired "A Caucus-Race and a Long Tale" was not, as might be expected, the famous "golden afternoon" voyage to Godstow that is credited with inspiring *Wonderland*. Rather, it was a voyage taken a few weeks earlier to another favourite picnic spot: Nuneham Park, on the Harcourt family estate in the village of Nuneham Courtenay, Oxfordshire. There, Dodgson picnicked with his college friend Robinson Duckworth, the three Liddell sisters, two Dodgson sisters (Fanny and Elizabeth) and his aunt, Lucy Lutwidge. Caught in an unexpected downpour, the entire company was drenched with rain.

Dodgson recorded the voyage in his diary: "Expedition to Nuneham. Duckworth ... and Ina, Alice and Edith came with us. We set out about 12½ and got to Nuneham about 2:15, dined there, and then walked in the park and set off for home about 4½. About a mile above Nuneham heavy rain came on, and after bearing it a short time I settled that we had better leave the boat and walk: 3 miles of this drenched us all pretty

well. I went on first with the children ... and took them to the only house I knew in Sandford ... I left them ... to get their clothes dried, and went off to find a vehicle ... Duckworth and I walked on to Iffley, whence we sent them a fly. We all had tea in my rooms about $8\frac{1}{2}$, after which I took the children home."

In *Alice's Adventures in Wonderland*, not a great deal of evidence remains of the Nuneham picnic. However, in the original manuscript, instead of the Dodo's proposal of a Caucus-race, a completely different passage appears that much more obviously draws on the real-life Nuneham outing:

This question the Dodo could not answer without a great deal of thought, and it sat for a long time with one finger pressed upon its forehead (the position in which you usually see Shakespeare, in the pictures of him), while the rest waited in silence. At last the Dodo said "Everybody has won, and all must have prizes."

"But who is to give the prizes?" quite a chorus of voices asked.

"Why, *she*, of course," said the Dodo, pointing to Alice with one finger; and the whole party at once crowded round her, calling out in a confused way, "Prizes! Prizes!"

Alice had no idea what to do, and in despair she put her hand in her pocket, and pulled out a box of comfits (luckily the salt water had not got into it), and handed them round as prizes. There was exactly one a-piece all round.

"But she must have a prize herself, you know," said the Mouse.

"Of course," the Dodo replied very gravely. "What else have you got in your pocket?" he went on, turning to Alice.

"Only a thimble," said Alice sadly.

"Hand it over here," said the Dodo.

Then they all crowded round her once more, while the Dodo solemnly presented the thimble, saying "We beg your acceptance of this elegant thimble"; and, when it had finished this short speech, they all cheered.

"I only meant to say," said the Dodo in rather an offended tone,

"that I know of a house near here, where we could get the young lady and the rest of the party dried, and then we could listen comfortably to the story which I think you were good enough to promise to tell us," bowing gravely to the mouse.

The mouse made no objection to this, and the whole party moved along the river bank (for the pool had by this time begun to flow out of the hall, and the edge of it was fringed with rushes and forget-me-nots), in a slow procession, the Dodo leading the way. After a time the Dodo became impatient, and, leaving the Duck to bring up the rest of the party, moved on at a quicker pace with Alice, the Lory, and the Eaglet, and soon brought them to a littler cottage, and there sat snugly by the fire, wrapped up in blankets, until the rest of the party had arrived, and they were all dry again.

A few pages later, Alice informs us: "if the Dodo hadn't known the way to that nice little cottage, I don't know when we should have got dry again."



Scene of the expedition: A view of Nuneham Courtenay by William Turner of Oxford (1789–1862).



The differences between the *Under Ground* and the *Wonderland*

versions at this point are peculiar. Why would Carroll switch finding a nearby house to a Caucus-race? A Caucus-race is a much less convincing way of getting dry, and certainly it is more confusing and less appealing to children. And what exactly is it? When no one can explain what a Caucus-race is, the Dodo simply states, "The best way to explain it is to do it."

The truth is that with the insertion of this episode into the *Wonderland* version, Carroll has entirely changed the agenda. The Caucus-race is not there to entertain children; it is there as a parody of Christ Church politics. One result is a shifting of the real-life identities of the Mouse, Dinah the cat and Fury the dog.

Although not explained by the Dodo, *caucus* is a term for a committee of political fixers who try to avoid a competitive race between candidates by arranging to promote a single candidate (or a united political position for the party) before an election. Martin Gardner convincingly suggests that Carroll meant the Caucus-race to symbolize a committee that typically does "a lot of running around in circles, getting nowhere, with everybody wanting a political plum." We certainly see this in the pointlessness of the race and the strange process and expectation of the prize-giving ceremony at the end of the race and the announcement that everybody wins!

Alice thought the whole thing very absurd, but they all looked so grave that she did not dare to laugh; and, as she could not think of anything to say, she simply bowed, and took the thimble, looking as solemn as she could.

The next thing was to eat the comfits: this caused some noise and confusion, as the large birds complained that they could not taste theirs, and the small ones choked and had to be patted on the back. However, it was over at last, and they sat down again in a ring, and begged the Mouse to tell them something more.

The Dodo's formal presentation to Alice of the "prize" of her own thimble is undoubtedly a reference to "thimblerigging," or the "shell game," a sleight-of-hand performed by Victorian fairground swindlers in which the victim is invited to bet on which of three shells a pea is hidden under.

In 1834, the expression entered the political arena when Lord Stanley gave his famous "Thimblerig speech," an attack on the Whigs' manipulation of Irish Church tithes and taxes. Thereafter, thimblerig came into common usage whenever a party or individual appeared to be manipulating or swindling the public. In Alice's case, the Dodo is a metaphoric politician who taxes a member of the public, then makes a great show of presenting it back as a "gift" for which he must be thanked.

LACHESIS, OR "SHE WHO ALLOTS"

For over two millennia, the most respected and established source of information about metempsychosis and ideas concerned with the resurrection of souls was the Myth of Er, from Plato's *Republic*. Er, the son of Armenios, dies in battle but revives days later on his funeral pyre and tells others of his journey into the afterlife. Carroll, of course, knew Plato's *Republic* well, and as a clergyman and a classicist, he was most interested in this extremely influential account of the world beyond the grave.

In Plato's Myth of Er, the behaviour of souls in the underworld is comparable to that of the creatures that emerge from the Pool of Tears. Many Victorians, like the ancient Greeks, believed in metempsychosis: the resurrection of the immortal soul in various human and animal forms.

Wonderland's "queer-looking party" of birds and animals assembled around Alice might be compared to a scene in the Myth of Er in which—in Francis Cornford's translation—"each company, as if they had come on a long journey, seemed glad to turn aside into the Meadow, where they encamped.... It was indeed, said Er, a sight worth seeing, how the souls severally chose their lives—a sight to move pity and laughter and astonishment; for the choice was mostly governed by the habits of their former life.... Souls in like manner passed from beasts into men and into one another, the unjust changing into the wild creatures, the just into the tame, in every sort of combination."

Also in the Myth of Er, a high priest called the Interpreter takes charge and gathers all the creature-souls together. This is similar to the Dodo marshalling the Wonderland creatures in order to conduct a strange sort of race—perhaps emblematic of their previous life cycle (for each runs at his own pace and finishes whenever he wishes). And in the end, there are no losers, for everybody wins and all are allotted a prize.

Compare this to the scene in the Myth of Er: "The souls, as soon as they came, were required to go before Lachesis. An Interpreter first marshalled them in order; and then, having taken from the lap of Lachesis a number of lots...[said:] Souls of a day, here shall begin a new round of earthly life.... You shall choose your own destiny."

As we have already seen in the prologue poem, Carroll has informed us of Alice's identity as Secunda, the fatal sister also known as Lachesis the Measurer or "She who allots." And this is confirmed as Alice allots the prizes in the form of comfits (candied fruits) "exactly one a-piece all round." In the Myth of Er, the Interpreter "scattered the lots among them all" and "each took up the lot which fell at his feet." And with these lottery tokens, each comes forward to choose its next life.

But what is this Mouse complaining about? It is only by identifying this much-aggrieved rodent that we can uncover the issues involved. Certainly, the meaning would have eluded Alice Liddell and her sisters, which is perhaps just as well, as the story essentially amounts to an attack on her father as dean of Christ Church and on his authority as head of the university.

The Mouse's story is an allusion to the Aesop's fable "Belling the Cat" (and likewise "The Mice in Council" by La Fontaine). Yet it is primarily meant as a political satire about the 1857 campaign by Christ Church students (lecturers and tutors) against the authority of the dean and the canons. The mice-and-cats metaphor for the students (mice) and the canons (cats) is a long-standing one: the Christ Church coat of arms displays four leopard faces, representing the canons of the college.

Carroll and other political pamphleteers at Christ Church often adapted the fable. Indeed, in a long poem in the pamphlet entitled "The Elections to the Hebdomadal Council" (1866), Carroll employs the fable as the basis for a continuation of the same long-running conservative student attempts to gain a place against the liberal reforms of Dean Liddell and his allies among the Canons. It reads:

"And here I must relate a little fable
I heard last Saturday at our high table:—
The cats, it seems, were masters of the house,
And held their own against the rat and mouse:
Of course the others couldn't stand it long,
So held a caucus (not, in their case, wrong)."

In this chapter, the Mouse is no longer the Liddell family governess, Miss Mary Prickett, but Thomas Jones Prout (1823–1909), the tenacious leader of the conservative faculty and students against the near-absolute authority of the liberal dean and the canons. Charles Dodgson also took an active part in the campaign. And like the Dodo, Dodgson came to the aide of the Mouse Prout and held caucus meetings of rebellious conservative tutors (mice) in his college rooms.

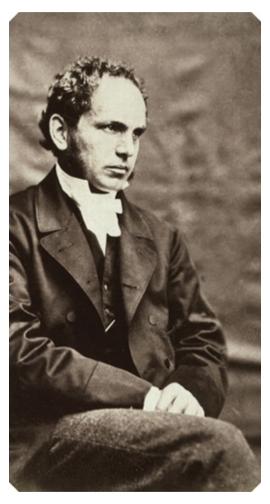


"The Mice in Council," illustrated by Gustave Doré.

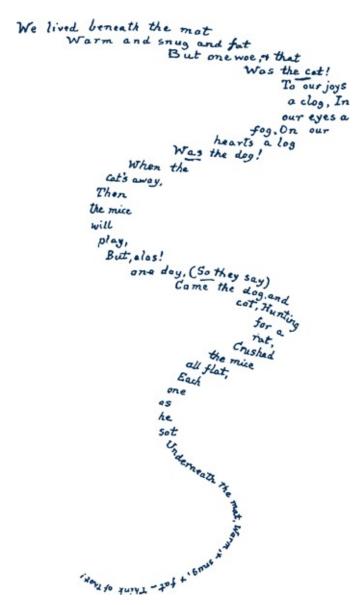


Although there is no obvious connection between the Mary Prickett Mouse and the Thomas Prout Mouse, by coincidence Miss Prickett was born in the village of Binsey, just north of Oxford, and Thomas Prout was later the curate of that same town, which was home to St. Margaret's Well, the "treacle-well" alluded to by the Dormouse at the Mad Hatter's tea party.

After the Caucus-race and the allotting of prizes, Alice reminds the Mouse that he has promised to tell his story of why he hates "C and D." All the creatures on the riverbank gather round, and the Mouse begins with what he describes will be "a long and a sad tale." This leads to a typical Carrollian extended pun whereupon Alice looks down at the Mouse's long tail and observes: "It is a long tail, certainly,…but why do you call it sad?"



Thomas Jones Prout: This photograph was, of course, taken by his conservative ally.



The original "tale/tail" in Carroll's handwriting.

With this pun, Alice combines the two homonyms and imaginatively creates the now famous Mouse's tale of a tail. This figured, or chirographic, poem is printed in a way that visually conveys its subject. Once again, the original *Under Ground* manuscript employs, in handwritten form, the same visual tale/tail idea and structure. However, it is a different poem entirely. In *Alice's Adventures Under Ground*, Alice's "idea of the tale was something like this:"

This original *Under Ground* tale/tail poem is more appropriate for a child reader as it attempts to give an explanation for the Mouse's hatred of C and D that would make sense to a child. The *Wonderland* version

explains only D: a vengeful dog named Fury "in the house" (Christ Church was always referred to as "The House" by its residents) who obscurely threatens to take legal action against the Mouse in a rigged court. It makes no mention of the cat. The story is never completed, and Alice manages to offend the Mouse and all the other birds and animals by injudiciously reintroducing stories about her affection for Dinah the cat (and Fury the dog).

"You promised to tell me your history, you know," said Alice, "and why it is you hate—C and D," she added in a whisper, half afraid that it would be offended again.

"Mine is a long and a sad tale!" said the Mouse, turning to Alice, and sighing.

"It is a long tail, certainly," said Alice, looking down with wonder at the Mouse's tail; "but why do you call it sad?" And she kept on puzzling about it while the Mouse was speaking, so that her idea of the tale was something like this:—

```
'Fury said to
        a mouse, That
             he met in the
                   house, "Let
                      us both go
                     to law: I
                   will prose-
                cute you.-
              Come, I'll
        take no den-
      ial; We
    must have
 a trial:
   For really
       this morn-
            ing I've
                 nothing
to do."
                  Said the
                mouse to
               the cur,
            "Such a
          trial, dear
          Sir, With
           no jury
              or judge,
would
                    be wast-
                    ing our
breath."
                   "I'll be
              judge,
I'll be
            jury,"
           said
         cunning
      old Fury:
       "Pll
          try the
        cause,
and
condemn
    you to
death.**
```



Arthur Stanley: The cat was a liberal canon.

The C, or cats, the Mouse hates are the canons of Christ Church, and the D, or dog, is the dean (and Alice Liddell's father), Henry George Liddell (1811–1898). The cat most feared by the mice appears to be Dinah. Dinah was the name of the real Deanery cat belonging to the Liddell sisters, but the fictional creature is also a reference to the dean's closest friend and confidant, Arthur Penrhyn Stanley (1815–1881).

"You are not attending!" said the Mouse to Alice severely. "What are you thinking of?"

"I beg your pardon," said Alice very humbly: "you had got to the fifth bend, I think?"

"I had not!" cried the Mouse, sharply and very angrily.

"A knot!" said Alice, always ready to make herself useful, and looking anxiously about her. "Oh, do let me help to undo it!"

"I shall do nothing of the sort," said the Mouse, getting up and walking away. "You insult me by talking such nonsense!"

"I didn't mean it!" pleaded poor Alice. "But you're so easily offended, you know!"

The Mouse only growled in reply.

"Please come back and finish your story!" Alice called after it. And the others all joined in chorus, "Yes, please do!" but the Mouse

only shook its head impatiently, and walked a little quicker.

Stanley was a liberal canon of Christ Church and a frequent target of Carroll's satirical squibs. He had been secretary to the 1851 royal commission of inquiry into the state of education at Oxford and Cambridge, and gave the impetus to all the liberal educational reforms that the heavily conservative faculty of Christ Church so strenuously wished to resist.

Educated at the Rugby School, and later its master, Stanley was widely believed to be the model for George Arthur in Thomas Hughes's novel *Tom Brown's School Days* (1857). A leading liberal theologian of his time, Stanley married the sister of Lord Elgin, then viceroy of India (and earlier governor general of Canada). He was a royal favourite and was chosen to accompany the Prince of Wales on his tour of the Middle East. He eventually became dean of Westminster Abbey and delivered sermons at the funerals of Thomas Carlyle and Benjamin Disraeli.

Like the dog in the Mouse's tale, the dean—with the help of Stanley and the other canons—was initially able to suppress the tutors' revolt and maintain authority. However, the tenacious Prout fought on, and nearly a decade later, through an alliance with the undergraduates, finally succeeded in winning more power for the predominantly conservative faculty and thereby slowing the pace of the Dean's liberal agenda at the university. Thomas Prout came to be known as "the man who slew the canons."

"What a pity it wouldn't stay!" sighed the Lory, as soon as it was quite out of sight. And an old Crab took the opportunity of saying to her daughter "Ah, my dear! Let this be a lesson to you never to lose *your* temper!" "Hold your tongue, Ma!" said the young Crab, a little snappishly. "You're enough to try the patience of an oyster!"

"I wish I had our Dinah here, I know I do!" said Alice aloud, addressing nobody in particular. "She'd soon fetch it back!"

"And who is Dinah, if I might venture to ask the question?" said the Lory.

Alice replied eagerly, for she was always ready to talk about her pet: "Dinah's our cat. And she's such a capital one for catching mice you can't think! And oh, I wish you could see her after the birds! Why, she'll eat a little bird as soon as look at it!"

This speech caused a remarkable sensation among the party. Some of the birds hurried off at once: one old Magpie began wrapping itself up very carefully, remarking "I really must be getting home; the night-air doesn't suit my throat!" and a Canary called out in a trembling voice to its children, "Come away, my dears! It's high time you were all in bed!" On various pretexts they all moved off, and Alice was soon left alone.

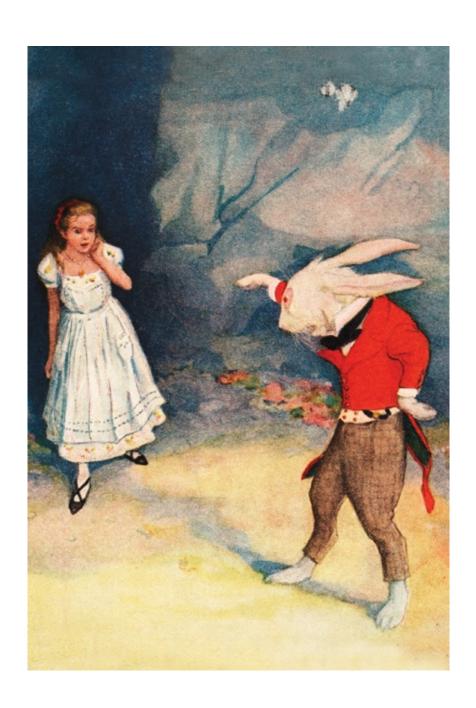
"I wish I hadn't mentioned Dinah!" she said to herself in a melancholy tone. "Nobody seems to like her, down here, and I'm sure she's the best cat in the world! Oh, my dear Dinah! I wonder if I shall ever see you any more!" And here poor Alice began to cry again, for she felt very lonely and low-spirited. In a little while, however, she again heard a little pattering of footsteps in the distance, and she looked up eagerly, half hoping that the Mouse had changed his mind, and was coming back to finish his story.

However, Prout the Mouse and Dodgson the Dodo proved to be among the last to gain life-long residency in "The House" through the old system of ecclesiastic privilege and favour. Under that system, no teaching or compulsory academic requirement was attached to the guarantee of a life-long salary with free college apartments, board and common-room membership. Dodgson was in residence for forty-seven years, while Prout the Mouse—despite the efforts of the dog—remained ensconced in a comfortable residency for sixty-seven years, "warm & snug & fat—Think of that!"

Chapter 4: The Rabbit Sends in a Little Bill

"It was much pleasanter at home," thought poor Alice, "when one wasn't always growing larger and smaller, and being ordered about by mice and rabbits."





A TEMPLE TO SCIENCE Alice again encounters the White Rabbit—but a White Rabbit who is no longer timid and does not flee from her. Formerly a magician's foil, the White Rabbit now seems to have assumed the authority of a magician himself. He doesn't live in a hole like a wild rabbit or in a hat like a magician's pet. He lives in a proper house with a brass plaque on the door. It reads: "W. RABBIT." This is the timid rabbit's *double* who has assumed an entirely different temperament.

The White Rabbit orders Alice around as if she were his housemaid—or perhaps a magician's assistant. He commands her to retrieve a couple of his magician's props: his white gloves and his fan. In fact, this whole scene and Alice's actions once she enters the house suggest Carroll has adopted the motif of the sorcerer's apprentice.

THE RABBIT SENDS IN A LITTLE BILL.

It was the White Rabbit, trotting slowly back again, and looking anxiously about as it went, as if it had lost something; and she heard it muttering to itself, "The Duchess! The Duchess! Oh my dear paws! Oh my fur and whiskers! She'll get me executed, as sure as ferrets are ferrets! Where can I have dropped them, I wonder?" Alice guessed in a moment that it was looking for the fan and the pair of white kid gloves, and she very goodnaturedly began hunting about for them, but they were nowhere to be seen—everything seemed to have changed since her swim in the pool, and the great hall, with the glass table and the little door, had vanished completely.

Very soon the Rabbit noticed Alice, as she went hunting about, and called out to her in an angry tone, "Why, Mary Ann, what *are* you doing out here? Run home this moment, and fetch me a pair of gloves and a fan! Quick, now!" And Alice was so much frightened that she ran off at once in the direction it pointed to, without trying to explain the mistake it had made.



Carroll knew Goethe's "The Sorcerer's Apprentice."

That tale was originally recorded in a collection entitled *Philopseudes* (Lover of Lies) by the second-century Greek author Lucian of Samosata. It was adapted by Johann Wolfgang von Goethe in 1797 into what became one of his most famous ballads, "Der Zauberlehrling," or "The Sorcerer's Apprentice." It was widely known throughout Europe during the nineteenth century, and Carroll's library included both Goethe's poem and Lucian's tale. Today, the story is best known in its adaption in the Disney film *Fantasia*.

In this tale, the apprentice is told to do chores in the sorcerer's house. Once alone, he decides to experiment with his master's wands and spells. The results nearly wreck the house. The moral, of course, is that you shouldn't meddle with things you don't understand.

"He took me for his housemaid," she said to herself as she ran. "How surprised he'll be when he finds out who I am! But I'd better take him his fan and gloves—that is, if I can find them." As she said this, she came upon a neat little house, on the door of which was a bright brass plate with the name "W. RABBIT" engraved upon it. She went in without knocking, and hurried upstairs, in great fear lest she should meet the real Mary Ann, and be turned out of the

house before she had found the fan and gloves.

"How queer it seems," Alice said to herself, "to be going messages for a rabbit! I suppose Dinah'll be sending me on messages next!" And she began fancying the sort of thing that would happen: "'Miss Alice! Come here directly, and get ready for your walk!' 'Coming in a minute, nurse! But I've got to watch this mouse-hole till Dinah comes back, and see that the mouse doesn't get out.' Only I don't think," Alice went on, "that they'd let Dinah stop in the house if it began ordering people about like that!"

Alice enters the White Rabbit's house on her errand to retrieve the gloves and fan, but then spots a little bottle next to a looking glass on the table. Like the apprentice, she decides to experiment without really understanding what she is doing—again with disastrous results. Once she drinks from the bottle, she grows so rapidly that she discovers her head pressing against the ceiling. In a couple more minutes she fills the entire room, and her every move threatens to wreck the house.

Throughout the episode, a very surprised Alice finds herself following the White Rabbit's orders, and fearing him when he commands her, even when she is "a thousand times as large as the Rabbit." She appears to have lost her identity and her place in the world as she contemplates the absurd idea of taking orders from her cat.

There is a clue to what is going on in Alice's search for her place in the natural order of things. As we have established the real-life identity of the White Rabbit as the Liddell family physician and Oxford's Regius Professor of Medicine Dr. Henry Wentworth Acland, it is reasonable to assume that the above-ground White Rabbit's house might be the newly constructed Oxford University Museum of Natural History—which was the target of at least two of Lewis Carroll's satirical political pamphlets.

Dr. Acland was the curator of the new museum, a pet project of his that was all about establishing the natural order of all life forms. An enthusiastic amateur naturalist, Acland oversaw the museum's construction and the assemblage of its collection from 1855 to 1860. The building was Oxford University's remarkable new neo-Gothic temple to science.

In 1858, in the partially completed museum galleries, Dr. Acland gave

a public lecture advocating the study of natural history as a means to understanding the designs of "the Supreme Master-Worker." Sidestepping the hot topic of evolution, Acland took the view that the study of nature was the study of "the Second Book of God."



Some hutch: The Oxford University Museum of Natural History.

By this time she had found her way into a tidy little room with a table in the window, and on it (as she had hoped) a fan and two or three pairs of tiny white kid gloves: she took up the fan and a pair of the gloves, and was just going to leave the room, when her eye fell upon a little bottle that stood near the looking-glass. There was no label this time with the words "DRINK ME," but nevertheless she uncorked it and put it to her lips. "I know *something* interesting is sure to happen," she said to herself, "whenever I eat or drink anything; so I'll just see what this bottle does. I do hope it'll make me grow large again, for really I'm quite tired of being such a tiny little thing!"

It did so indeed, and much sooner than she had expected: before she had drunk half the bottle, she found her head pressing against the ceiling, and had to stoop to save her neck from being broken. She hastily put down the bottle, saying to herself "That's quite enough—I hope I shan't grow any more—As it is, I can't get out at the door—I do wish I hadn't drunk quite so much!"

This was probably a judicious way of describing natural history, as the

construction of this new temple to science had largely been financed by the Oxford University Press's sales of "the First Book of God," the Oxford Bible.

The museum was also the first major building project undertaken by Dean Liddell in an ambitious plan for the architectural expansion and transformation of the University of Oxford. With Dean Liddell and Canon Arthur Stanley's recommendation, Dr. Acland was advised concerning the museum's architectural design and decor by John Ruskin, the high priest of the then fashionable neo-Gothic architecture.

Carroll gives a clue to the identity of the White Rabbit's house when Alice hears "a crash of broken glass." Alice, we are told, assumes the White Rabbit has fallen through "a cucumber-frame, or something of the sort." After a few other crashes, she thinks: "What a number of cucumber frames there must be!"

To solve this riddle, we must look to popular key phrases of the time. "Cucumber frame" was the Victorian term for a glass greenhouse. One of the great events of this era was the 1851 Great Exhibition in the spectacular exhibition halls of the Crystal Palace, in London's Hyde Park. It was a building enthusiastically described in a letter by Carroll to his sister Elizabeth as a "fairyland." The Crystal Palace was the world's first massive prefabricated glass-and-iron structure. Although it proved to be a great success, its initial detractors in the press frequently quoted John Ruskin's opinion that it was essentially "a cucumber frame between two chimneys."

Alas! It was too late to wish that! She went on growing, and growing, and very soon had to kneel down on the floor: in another minute there was not even room for this, and she tried the effect of lying down with one elbow against the door, and the other arm curled round her head. Still she went on growing, and, as a last resource, she put one arm out of the window, and one foot up the chimney, and said to herself "Now I can do no more, whatever happens. What will become of me?"

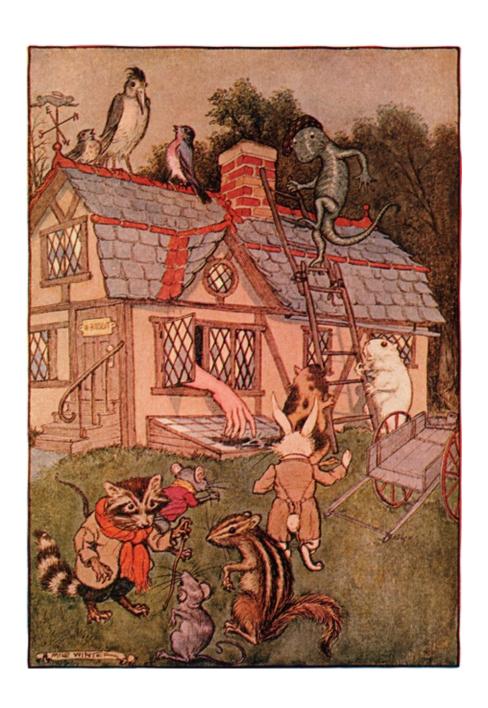
Luckily for Alice, the little magic bottle had now had its full effect, and she grew no larger: still it was very uncomfortable, and, as there seemed to be no sort of chance of her ever getting out of

the room again, no wonder she felt unhappy.

The Natural History Museum's architects attempted to integrate this new technology into their High Gothic Revival structure by installing an iron-and-glass roof that would allow natural light into its central exhibition hall. However, the builders' expertise with this new technology was not on par with that of the Crystal Palace engineers, and the roof collapsed. At considerable cost, it had to be rebuilt. This explains Alice's remark: "I wonder what they *will* do next! If they had any sense, they'd take the roof off."

A decade later, Lewis Carroll wrote a satirical squib entitled "The Blank Cheque" that reflects on the construction of the "High Art" Gothic Natural History Museum. Besides its "cucumber frames," the White Rabbit's house appears to have a great number of windows and chimneys in common with the neo-Gothic museum.

In "The Blank Cheque," a thinly veiled characterization of Dean Liddell's wife describes the construction of "houses that were all windows and chimneys—what they call 'High Art,' I believe. We tried a conservatory once on the High-Art principle, and (would you believe it?) the man stuck the roof up on a lot of rods like so many knitting needles! Of course it soon came down about our ears, and we had to do it all over again." The conservatory would have been understood by all to be Oxford's Natural History Museum.





Elias Ashmole was the model for the theosophical White Rabbit.

ROSICRUCIAN RABBIT HOUSE The natural history collection of the University of Oxford's Ashmolean Museum (including its unique dodo specimen) formed the basis of the new Oxford University Museum of Natural History. The founder and curator of the Ashmolean was the model for Carroll's theosophical White Rabbit, ELIAS ASHMOLE (1617–1692), who was also a physician, antiquary,

astrologer, alchemist, Freemason and member of the Royal Society. Furthermore, he was the adopted son of William Backhouse, a Fellow of Carroll's own Christ Church and a celebrated early Rosicrucian alchemist.

Just as the Wonderland White Rabbit was a herald to the King of Hearts, so Elias Ashmole was appointed Windsor Herald—an officer of the College of Arms—to King James I. And like the White Rabbit in Wonderland's royal court, Elias Ashmole became an authority on court protocol and ceremony.

Ashmole is also easily linked to the mythological White Rabbit through his coat of arms, which is surmounted by the figure of the Greco-Roman god Hermes, or Mercury, the herald to the Olympian gods. Like the White Rabbit, Mercury was a psychopomp. He was the underworld guide for both dreamers and the dead. The White Rabbit guided Alice down into the underground world of Wonderland; Mercury guided Persephone from Hades back to the living world.

In the Hermetic alchemical tradition, Mercury was the Medieval Latin Mercurius, who was also the Greco-Egyptian Hermes Trismegistus: the father of alchemy and the supposed author of the sacred ancient alchemical text the Emerald Tablet. Curiously, the introductory engraving of Ashmole's most important alchemical work, *Theatrum Chemicum Britannicum* (1652), displays an emblematic border with rabbits feeding in a garden.



Ashmole's coat of arms contains a clue to his other identity.



Like the White Rabbit, Mercury was a psychopomp, or "guide of souls."

The title of this chapter, "The Rabbit Sends in a Little Bill," is also directly related to the construction of the Museum of Natural History. Given that the Oxford White Rabbit, Dr. Acland, had to submit Dean Liddell's expenditure bill to the Congregation—the university's

parliament of senior members—for payment (and keeping in mind that Liddell rhymes with "fiddle" and sounds like "little") the title can be translated to read, "Dr. Acland Sends in a Liddell Bill."

"Liddell Bill" it may have been, but it certainly wasn't little. It was an enormous one that had to be reduced and redrafted. Carroll opposed the bill and wanted to know who was going to pay, and consequently allowed Alice to provide the indignant answer. Rather than footing the bill, she discovers she "can kick a little," and soundly boots the unfortunate little lizard Bill—or "Liddell Bill"—out of the house.

"It was much pleasanter at home," thought poor Alice, "when one wasn't always growing larger and smaller, and being ordered about by mice and rabbits. I almost wish I hadn't gone down that rabbithole—and yet—and yet—it's rather curious, you know, this sort of life! I do wonder what can have happened to me! When I used to read fairy tales, I fancied that kind of thing never happened, and now here I am in the middle of one! There ought to be a book written about me, that there ought! And when I grow up, I'll write one—but I'm grown up now," she added in a sorrowful tone; "at least there's no room to grow up any more here."

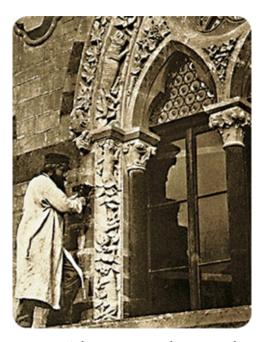
"But then," thought Alice, "shall I never get any older than I am now? That'll be a comfort, one way—never to be an old woman—but then—always to have lessons to learn! Oh, I shouldn't like that!"

"Oh, you foolish Alice!" she answered herself. "How can you learn lessons in here? Why, there's hardly room for *you*, and no room at all for any lesson-books!"

And so she went on, taking first one side and then the other, and making quite a conversation of it altogether; but after a few minutes she heard a voice outside, and stopped to listen.

An interesting aside to the disputes over the Liddell Bill suggests that the White Rabbit's Pat the gardener was the Museum's Irish stonemason James O'Shea. Under the direction of John Ruskin, O'Shea was charged with creating a "stone garden" in the form of decorative carvings of plants and animals throughout the museum. When funds ran low, the Congregation refused to pay for any further work. A vengeful O'Shea

proceeded—without pay—to carve caricatures of college authorities on the faces of parrots and owls around the entrance to the building. Humourless Congregationalists had to pay to have the creatures' faces removed.



James O'Shea: Revenge by gargoyle.

The identity of Bill the Lizard gives this episode another level of interpretation—and we discover that we must also deal with another bill and another house entirely. On the level of national politics, Bill the Lizard was meant to be Benjamin Disraeli (1804–1881), who became prime minister in 1874. The transformation of Benjamin Disraeli into Bill the Lizard can be achieved by taking the letters in "B. Lizard" and rearranging them to give us "B. Dzrali," a phonetic anagram for "B. Disraeli."



Disraeli: Finance minister and future PM.

"Mary Ann! Mary Ann!" said the voice. "Fetch me my gloves this moment!" Then came a little pattering of feet on the stairs. Alice knew it was the Rabbit coming to look for her, and she trembled till she shook the house, quite forgetting that she was now about a thousand times as large as the Rabbit, and had no reason to be afraid of it.

Presently the Rabbit came up to the door, and tried to open it; but, as the door opened inwards, and Alice's elbow was pressed hard against it, that attempt proved a failure. Alice heard it say to itself "Then I'll go round and get in at the window."

"That you won't!" thought Alice, and, after waiting till she fancied she heard the Rabbit just under the window, she suddenly spread out her hand, and made a snatch in the air. She did not get hold of anything, but she heard a little shriek and a fall, and a crash of broken glass, from which she concluded that it was just possible it had fallen into a cucumber-frame, or something of the sort.



Gladstone: Brawls with Disraeli in Looking-Glass.

The anagram is even more appropriate given that "Dizzy" was the nickname given him by the popular press. In one famous Punch cartoon, Dizzy is a circus entertainer climbing what he called "the greasy pole" of politics; in *Wonderland*, he is the Lizard climbing on ladders up onto the roof, then down a chimney. In *Through the Looking-Glass*, Disraeli is caricatured twice, once as the man in the paper hat on the train with Alice, and in the second case as the Unicorn in a brawl with his great opponent the Lion—that other great Victorian prime minister, William Ewart Gladstone.





Illustration for The Hunting of the Snark—with lizard suggested by Carroll—by Henry Holiday

Aside from anagrams and climbing skills, there is one other reason that Disraeli is portrayed as the Lizard. Just as Bill the Lizard was kicked out of the Wonderland house, in 1852 Disraeli was the chancellor of the exchequer—finance minister—who first introduced what is now the modern form of income tax—that is, a variable income-based taxation system. The income tax bill became law, but it caused such a furor that Dizzy was kicked out of the House as chancellor, and his party ended up in the opposition benches.

Next came an angry voice—the Rabbit's—"Pat! Pat! Where are you?" And then a voice she had never heard before, "Sure then I'm here! Digging for apples, yer honour!"

"Digging for apples, indeed!" said the Rabbit angrily. "Here! Come and help me out of this!" (Sounds of more broken glass.)

"Now tell me, Pat, what's that in the window?"

"Sure, it's an arm, yer honour!" (He pronounced it "arrum.")

"An arm, you goose! Who ever saw one that size? Why, it fills the whole window!"

"Sure, it does, yer honour: but it's an arm for all that."

"Well, it's got no business there, at any rate: go and take it away!"

Further confirmation that Disraeli is the Lizard comes in Carroll's *The Hunting of the Snark* (1876). There we find an illustration with a little pickpocket lizard at work with his hand in someone's pocket. He is obviously a tax-collecting lizard, as we can clearly see a paper labelled "income tax" protruding from his own pocket. It appears Carroll continued to blame Disraeli for the institution of the income-based taxation system. In another poem, Carroll carps that "the worst of human ills ... are 'little bills'!" This also goes some way toward explaining Alice's comment, "Why, they seem to put everything upon Bill!"

Like the sorcerer who returns to the chaos brought about by his apprentice, the White Rabbit tries to find a way to stop Alice from

destroying his house. After many attempts, he finally orders delivery of a "barrowful" of white pebbles that transform into little cakes. When Alice eats one, she becomes small enough to escape through the door. Once outside, she flees from a mob of animals and runs off into a wood.

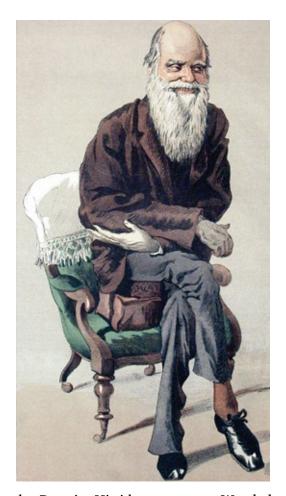
She finds, though, that her predicament is worse than ever. She has shrunk down to three inches and is almost trampled by an over-friendly giant puppy.

There was a long silence after this, and Alice could only hear whispers now and then; such as, "Sure, I don't like it, yer honour, at all, at all!" "Do as I tell you, you coward!" and at last she spread out her hand again, and made another snatch in the air. This time there were *two* little shrieks, and more sounds of broken glass. "What a number of cucumber-frames there must be!" thought Alice. "I wonder what they'll do next! As for pulling me out of the window, I only wish they *could*! I'm sure I don't want to stay in here any longer!"

She waited for some time without hearing anything more: at last came a rumbling of little cart-wheels, and the sound of a good many voices all talking together: she made out the words: "Where's the other ladder?—Why, I hadn't to bring but one. Bill's got the other—Bill! Fetch it here, lad!—Here, put 'em up at this corner—No, tie 'em together first—they don't reach half high enough yet—Oh, they'll do well enough. Don't be particular—Here, Bill! Catch hold of this rope—Will the roof bear?—Mind that loose slate—Oh, it's coming down! Heads below!" (a loud crash)—"Now, who did that?—It was Bill, I fancy—Who's to go down the chimney?—Nay, I shan't! *You* do it!—*That* I won't, then!—Bill's to go down—Here, Bill! The master says you're to go down the chimney!"

The above-ground identity of the "enormous puppy" has always been something of a puzzle. A clue, though, may be in its habitat: the grounds of the Natural History Museum. The most celebrated event to take place in the newly constructed museum was the 1860 debate between Thomas Huxley and Samuel Wilberforce, the bishop of Oxford, over Darwin's new theory of evolution.

As the critic William Empson observes, Darwinian ideas permeate *Alice's Adventures in Wonderland*. This is especially evident in the Pool of Tears and, as we shall see, in the Duchess's kitchen. There must have been some reason for Carroll to illustrate apes with dodos and other animals emerging from the salty primeval waters of the Pool of Tears (in both the *Under Ground* and *Wonderland* versions).



Charles Darwin: His ideas permeate Wonderland.

We do know that in the years before and during the composition of *Wonderland*, Carroll took considerable notice of the dispute over Darwin's 1859 publication of *On the Origin of Species*, and that Carroll's library contained twenty books on Darwinian evolution. Indeed, one of these—an argument for what is now called creation science and intelligent design—was entitled *Paley's Evidence of Christianity*, which might have suggested the title of *Wonderland*'s final chapter: "Alice's

Evidence."

"Oh! So Bill's got to come down the chimney, has he?" said Alice to herself. "Why, they seem to put everything upon Bill! I wouldn't be in Bill's place for a good deal: this fireplace is narrow, to be sure; but I *think* I can kick a little!"

She drew her foot as far down the chimney as she could, and waited till she heard a little animal (she couldn't guess of what sort it was) scratching and scrambling about in the chimney close above her: then, saying to herself "This is Bill," she gave one sharp kick, and waited to see what would happen next.

The first thing she heard was a general chorus of "There goes Bill!" then the Rabbit's voice along—"Catch him, you by the hedge!" then silence, and then another confusion of voices—"Hold up his head—Brandy now—Don't choke him—How was it, old fellow? What happened to you? Tell us all about it!"

With all this in mind, it has been suggested that the "enormous puppy" was meant to be Charles Darwin (1809–1882). The puppy in Carroll's mind (but not in that of his illustrator, John Tenniel) may have been a beagle, and consequently could have been an allusion both to Darwin's ship the *Beagle* and to his book (owned by Carroll) *The Voyage of the Beagle*.

PEBBLES AND CALCULUS What is being suggested by these "little pebbles" and their magical power to transform? The Latin for "pebble" is *calculus*, which is also the name of a branch of mathematics that concerns itself with change, and the manipulation of the infinitely large and the infinitely small. Notable as well is the delivery of a "barrowful" of pebbles: it was Isaac Barrow, in tandem with Isaac Newton, who discovered the formulation of infinitesimal calculus—a subject about which Alice has "not the smallest idea."

Why do the pebbles become cakes? The subject of Lewis Carroll's essay "Feeding the Mind" (1884) suggests they may be metaphorically food for thought, an idea that relates to Plato's

observation that theorems "are to be enjoyed as much as possible, as if they were ambrosia and nectar." Cakes are also treats, or in mathematical terminology, "treatments," meaning experiments. This interpretation perhaps explains why the first cake eaten by Alice in the great hall had no effect until she decided to "set to work, and very soon finished off the cake."

Last came a little feeble, squeaking voice ("That's Bill," thought Alice), "Well, I hardly know—No more, thank ye; I'm better now—but I'm a deal too flustered to tell you—all I know is, something comes at me like a Jack-in-the-box, and up I goes like a sky-rocket!"

"So you did, old fellow!" said the others.

"We must burn the house down!" said the Rabbit's voice. And Alice called out as loud as she could, "If you do, I'll set Dinah at you!"

There was a dead silence instantly, and Alice thought to herself, "I wonder what they *will* do next! If they had any sense, they'd take the roof off." After a minute or two, they began moving about again, and Alice heard the Rabbit say, "A barrowful will do, to begin with."

"A barrowful of *what*?" thought Alice. But she had not long to doubt, for the next moment a shower of little pebbles came rattling in at the window, and some of them hit her in the face. "I'll put a stop to this," she said to herself, and shouted out "You'd better not do that again!", which produced another dead silence.

Alice noticed with some surprise that the pebbles were all turning into little cakes as they lay on the floor, and a bright idea came into her head. "If I eat one of these cakes," she thought, "it's sure to make *some* change in my size; and as it can't possibly make me larger, it must make me smaller, I suppose."

So she swallowed one of the cakes, and was delighted to find that she began shrinking directly. As soon as she was small enough to get through the door, she ran out of the house, and found quite a crowd of little animals and birds waiting outside. The poor little Lizard, Bill, was in the middle, being held up by two guinea-pigs, who were giving it something out of a bottle. They all made a rush at Alice the moment she appeared; but she ran off as hard as she could, and soon found herself safe in a thick wood.

"The first thing I've got to do," said Alice to herself, as she wandered about in the wood, "is to grow to my right size again; and the second thing is to find my way into that lovely garden. I think that will be the best plan."

It sounded an excellent plan, no doubt, and very neatly and simply arranged; the only difficulty was, that she had not the smallest idea how to set about it; and while she was peering about anxiously among the trees, a little sharp bark just over her head made her look up in a great hurry.

An enormous puppy was looking down at her with large round eyes, and feebly stretching out one paw, trying to touch her. "Poor little thing!" said Alice, in a coaxing tone, and she tried hard to whistle to it; but she was terribly frightened all the time at the thought that it might be hungry, in which case it would be very likely to eat her up in spite of all her coaxing.

Hardly knowing what she did, she picked up a little bit of stick, and held it out to the puppy; whereupon the puppy jumped into the air off all its feet at once, with a yelp of delight, and rushed at the stick, and made believe to worry it; then Alice dodged behind a great thistle, to keep herself from being run over; and the moment she appeared on the other side, the puppy made another rush at the stick, and tumbled head over heels in its hurry to get hold of it; then Alice, thinking it was very like having a game of play with a carthorse, and expecting every moment to be trampled under its feet, ran round the thistle again; then the puppy began a series of short charges at the stick, running a very little way forwards each time and a long way back, and barking hoarsely all the while, till at last it sat down a good way off, panting, with its tongue hanging out of its mouth, and its great eyes half shut.

This seemed to Alice a good opportunity for making her escape; so she set off at once, and ran till she was quite tired and out of breath, and till the puppy's bark sounded quite faint in the distance.

"And yet what a dear little puppy it was!" said Alice, as she leant against a buttercup to rest herself, and fanned herself with one of the leaves. "I should have liked teaching it tricks very much, if—if I'd only been the right size to do it! Oh dear! I'd nearly forgotten that I've got to grow up again! Let me see—how is it to be managed? I suppose I ought to eat or drink something or other; but the great question is, what?"

The great question certainly was, what? Alice looked all round her at the flowers and the blades of grass, but she did not see anything that looked like the right thing to eat or drink under the circumstances. There was a large mushroom growing near her, about the same height as herself; and, when she had looked under it, and on both sides of it, and behind it, it occurred to her that she might as well look and see what was on the top of it.

She stretched herself up on tiptoe, and peeped over the edge of the mushroom, and her eyes immediately met those of a large caterpillar, that was sitting on the top with its arms folded, quietly smoking a long hookah, and taking not the smallest notice of her or of anything else.

An alternative suggestion is that the enormous puppy was meant to be Thomas Huxley (1825–1895), who—as the quintessential defender of the theory of evolution—became known as "Darwin's Bulldog."

Whether these allusions were intended or not, Lewis Carroll during the *Wonderland* years was very familiar with the issues and personalities involved in the debate over evolution. What's more, he photographed Thomas Huxley and Samuel Wilberforce along with virtually every significant participant and member of the audience at that famous debate in the White Rabbit's house: the Oxford University Museum of Natural History.

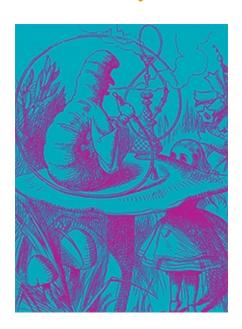
Also, rather remarkably given that he was very much a skeptic about evolution, Carroll had previously written to Charles Darwin to offer his services as a photographer for a physiological study of apes and humans.



Thomas Huxley: Did he evolve into a puppy?

Chapter 5: Advice from a Caterpillar

"Who are you?"





DE QUINCEY'S CATERPILLAR After fleeing the White Rabbit's house, Alice is once again only three inches tall. This at least is a good size for meeting the Caterpillar, one of the most mysterious beings in Wonderland. The Caterpillar is blue and arrogant. He rather rudely asks Alice, "Who are you?" In despair, Alice answers that she hardly knows because she keeps changing in size and shape all the time. The Caterpillar doesn't see this as a problem; after all, for a creature destined to metamorphose into a butterfly, transformation of size and shape is entirely natural.

The hookah-smoking Caterpillar became a celebrated figure in the 1960s drug culture. There was a belief in some quarters that *Wonderland* was written under the influence of opium or psilocybin mushrooms. From his journals, it is clear that Carroll knew a considerable amount about the use of opium and on at least one occasion had consulted a medical doctor about it. Also, as a classicist he would have been familiar with the theory that ancient Greek cults ingested mushrooms to induce trances and visions. However, there is no evidence that Carroll ever indulged in any hallucinatory substance.



Thomas De Quincey: Carroll was addicted to his writing.

ADVICE FROM A CATERPILLAR.

The Caterpillar and Alice looked at each other for some time in silence: at last the Caterpillar took the hookah out of its mouth, and addressed her in a languid, sleepy voice.

"Who are you?" said the Caterpillar.

This was not an encouraging opening for a conversation. Alice replied, rather shyly, "I—I hardly know, sir, just at present—at least I know who I was when I got up this morning, but I think I must have been changed several times since then."

"What do you mean by that?" said the Caterpillar sternly. "Explain yourself!"

"I can't explain *myself*, I'm afraid, sir" said Alice, "because I'm not myself, you see."

"I don't see," said the Caterpillar.

"I'm afraid I can't put it more clearly," Alice replied very politely, "for I can't understand it myself to begin with; and being so many different sizes in a day is very confusing."

"It isn't," said the Caterpillar.

The nineteenth-century model for the Caterpillar was Thomas DE Quincey (1785–1859), whose book *Confessions of an English Opium-Eater* (1821) was Carroll's primary source of information on the contents of the hookah. In November 1857, the young Carroll recorded in his diary: "Finished the first volume of De Quincey. It is perfectly delightful reading, and full of information of all kinds." He read the second volume a month later and eventually acquired all fourteen volumes of De Quincey's writings. That same month, Carroll committed himself to a reading program for the year, organized by category: mathematics, history, and so on. For the prose and poetry category, he chose only two authors: De Quincey and William Shakespeare.

De Quincey was a prodigy and wild child who was admitted to Oxford as an undergraduate at the age of fifteen. Later, he lived in London and the Lake District, where he became friends with William Wordsworth, Charles Lamb and fellow opium addict Samuel Taylor Coleridge. Like the Caterpillar, he was sought out by some for his intelligent discourse and

penetrating insights, but was just as often avoided by others because he was perceived as something of a social misfit.

It seems likely that certain aspects of *Wonderland*'s dream world were influenced by a second-hand experience of the drug—Carroll's reading of De Quincey. Observe, for example, the shifting, surreal nature of time, space and proportion in Alice's Wonderland dream, then compare it to De Quincey's description: "The sense of space, and in the end, the sense of time, were both powerfully affected. Buildings, landscapes, &c., were exhibited in proportions so vast as the bodily eye is not fitted to receive. Space swelled, and was amplified to an extent of unutterable infinity. This, however, did not disturb me so much as the vast expansion of time; I sometimes seemed to have lived for 70 or 100 years in one night."

"Well, perhaps you haven't found it so yet," said Alice; "but when you have to turn into a chrysalis—you will some day, you know—and then after that into a butterfly, I should think you'll feel it a little queer, won't you?"

"Not a bit," said the Caterpillar.

"Well, perhaps *your* feelings may be different," said Alice: "all I know is, it would feel very queer to *me*."

"You!" said the Caterpillar contemptuously. "Who are you?"

Which brought them back again to the beginning of the conversation. Alice felt a little irritated at the Caterpillar's making such *very* short remarks, and she drew herself up and said, very gravely, "I think, you ought to tell me who *you* are, first."

"Why?" said the Caterpillar.

Here was another puzzling question; and, as Alice could not think of any good reason, and as the Caterpillar seemed to be in a *very* unpleasant state of mind, she turned away.

"Come back!" the Caterpillar called after her. "I've something important to say!"

This sounded promising, certainly. Alice turned and came back again.

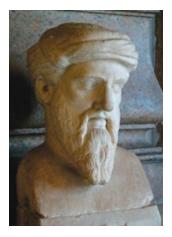
Although the nineteenth-century Oxford model for the Caterpillar was

Thomas De Quincey, any classically educated Victorian contemporary of Carroll's would easily perceive in the Caterpillar the multiple allusions to the ancient Greek philosopher, mathematician and semi-divine mystic Pythagoras of Samos (c. 570–c. 495 Bc). Today, Pythagoras is almost solely known for his geometric theorem: in a right-angled triangle, the square of the hypotenuse is equal to the sum of the squares of the other two sides—that is, $a^2 + b^2 = c^2$. However, in Carroll's time the life, theories and beliefs of Pythagoras were popularly known and discussed in fashionable society. His teaching concerning metempsychosis—the transmigration and reincarnation of the soul—is suggested by his personification as the metamorphosing Caterpillar.

As well, the Caterpillar's interrogations of Alice are strongly suggestive of Pythagoras's teachings, which were allied to the dictates of Apollo, whose temples were inscribed with the mottos "Know thyself" and "Moderation in all things." Immediately upon their first encounter, the Pythagorean Caterpillar addresses the first of these maxims by asking Alice, "Who are *you*?"

Alice is unsure in her answer, and squirms and dithers before the impatient Caterpillar, who prods her further: "You! said the Caterpillar contemptuously. Who are *you*?" Alice is so put out by the Caterpillar's apparent rudeness that she begins to walk off. The Caterpillar calls her back and gives her another opportunity to resolve her identity crisis.

"Keep your temper," says the Caterpillar. Alice is perplexed, but does follow his advice, "swallowing down her anger as well as she could." Pythagorean tempering is a harmonic system that applies equally to music, philosophy and mathematics. Here the Caterpillar is teaching Alice the Pythagorean belief that through tempering the spirit, the mind is freed to control the physical problems of the body. "Are you content now?" asks the Caterpillar. The Caterpillar-Pythagoras advocates a mental state of meditative calm, removed from the extremes of human emotion, before his pupil is fully capable of understanding.



Pythagoras: There were many other sides to him.

"Keep your temper," said the Caterpillar.

"Is that all?" said Alice, swallowing down her anger as well as she could.

"No," said the Caterpillar.

Alice thought she might as well wait, as she had nothing else to do, and perhaps after all it might tell her something worth hearing. For some minutes it puffed away without speaking, but at last it unfolded its arms, took the hookah out of its mouth again, and said, "So you think you're changed, do you?"

"I'm afraid I am, sir," said Alice. "I can't remember things as I used—and I don't keep the same size for ten minutes together!"

"Can't remember what things?" said the Caterpillar.

"Well, I've tried to say 'How doth the little busy bee,' but it all came different!" Alice replied in a very melancholy voice.



A harmonic system: Pythagoreans' Hymn to the Rising Sun, by Fedor Andreevich Bronnikov, 1869.

A TELEPATHIC CATERPILLAR

Alice is astonished to discover that the Caterpillar is capable of reading her thoughts "just as if she had asked it aloud." In the creation of his mind-reading Caterpillar, Carroll reveals an interest in psychic phenomena that was lifelong, and strongly apparent in all of his writing. He was a member of the Ghost Society For Paranormal Investigation (1862) and the Society For Psychical Research (1882). He became interested in many aspects of psychic phenomena, including such fads as automatic writing, ghost painting, transcendental physics and psychophysics.

Nearly all of Carroll's creative writing and occasional poems were on themes related to these interests, including an entire collection entitled *Phantasmagoria* (1869). These themes are discernible in both Alice books and especially in his two Sylvie and Bruno novels.

On the subject of telepathy, Carroll wrote: "All seems to point to the existence of a natural force, allied to electricity and nerve-force, by which brain can act on brain. I think we are close on the day when this shall be classed among the known natural forces, and its laws tabulated, and when the scientific sceptics, who always shut their eyes, till the last moment, to any evidence that seems to point beyond materialism, will have to accept it as a proved fact in nature."



Max Müller: Carroll's colleague and an authority on theosophy.

It was this fascination with other psychic dimensions that Carroll would explore in ever-greater depth over his lifetime. In *Sylvie and Bruno Concluded*, he explains, "I have supposed a Human being to be capable of various psychical states, with varying degrees of consciousness," and writes that people may become conscious of these dimensions "by actual transference of their immaterial essence, such as we meet with in 'Esoteric Buddhism.'"

Lewis Carroll reveals a great deal with his use of the term "Esoteric Buddhism." For as the famous medium Madame Helena Petrovna Blavatsky (1831–1891) explained in the first line of the introduction to her *Secret Doctrine*: "Since the appearance of Theosophical literature in England, it has become customary to call its teachings 'Esoteric Buddhism.'"

Carroll's interest in theosophy long preceded *Mme*. Blavatsky's Theosophical Society and the later Order of the Golden Dawn. As Carroll was well aware—and his Oxford colleague Max Müller explained in his *Theosophy, or Psychological Religion*—the term *theosophy* was coined by the Alexandrian mystics and Neoplatonists

of the fourth century AD. It was derived from the Greek *theosophia*, meaning "god-wisdom" or "knowledge of the divine." It entered the English language in the seventeenth century and came to mean "wisdom about God and nature obtained through mystical study."

We know that Carroll was familiar with many of the works of Thomas Taylor, whose writings in the late eighteenth and early nineteenth centuries did so much to revive theosophy and other esoteric studies that were an inspiration to many of the poets Carroll most admired: Blake, Shelley, Coleridge, Wordsworth, Tennyson and Browning. However, Carroll's writing was most profoundly influenced on this level by a specific branch of theosophical literature: the Brotherhood of the Rosicrucians.



Edward Bulwer-Lytton: Penned "mightier than the sword."

"I felt the desire to make myself acquainted with the true origins and tenets of the singular sect known by the name of Rosicrucians." So began Edward Bulwer-Lytton's *Zanoni: A Rosicrucian Tale*, a flamboyant gothic novel about an immortal Rosicrucian. The book is filled with revelations concerning Rosicrucian mysteries, initiations and alchemical practices.

Although the Rosicrucian movement declared itself in 1614, it became part of popular culture only with the 1842 publication of *Zanoni*. Baron Lytton, author of *The Last Days of Pompeii*, was among the most popular gothic novelists of his day. Today he is best remembered for coining such popular phrases as "the great

unwashed" and "the pen is mightier than the sword," and his famous opening line, "It was a dark and stormy night."

Carroll read *Zanoni*, and it certainly provoked his interest in the Rosicrucians. But it was far from being his only source of knowledge about Rosicrucian theosophy. It is likely his readings included that of the Oxford Caterpillar Thomas De Quincey's 1824 "Historico-Critical Inquiry into the Origin of the Rosicrucians and the Free-Masons." And in that work, De Quincey states his opinion that "Freemasonry is neither more nor less than Rosicrucianism as modified by those who transplanted it to England."



Caterpillar mark I: A drawing by Carroll from the manuscript of *Alice's Adventures Under Ground*.

Alice folded her hands, and began:—

"You are old, Father William," the young man said, "And your hair has become very white; And yet you incessantly stand on your head—Do you think, at your age, it is right?"

"In my youth," Father William replied to his son, "I feared it might injure the brain;
But, now that I'm perfectly sure I have none,
Why, I do it again and again."

"You are old," said the youth, "as I mentioned before, And have grown most uncommonly fat; Yet you turned a back-somersault in at the door— Pray, what is the reason of that?"

"In my youth," said the sage, as he shook his grey locks, "I kept all my limbs very supple
By the use of this ointment—one shilling the box—
Allow me to sell you a couple?"

"You are old," said the youth, "and your jaws are too weak For anything tougher than suet; Yet you finished the goose, with the bones and the beak— Pray how did you manage to do it?"

"In my youth," said his father, "I took to the law, And argued each case with my wife; And the muscular strength, which it gave to my jaw, Has lasted the rest of my life."

"You are old," said the youth, "one would hardly suppose That your eye was as steady as ever; Yet you balanced an eel on the end of your nose— What made you so awfully clever?"

"I have answered three questions, and that is enough," Said his father; "don't give yourself airs!

Do you think I can listen all day to such stuff?

Be off, or I'll kick you down stairs!"

"That is not said right," said the Caterpillar.

"Not *quite* right, I'm afraid," said Alice, timidly; "some of the words have got altered."

"It is wrong from beginning to end," said the Caterpillar decidedly, and there was silence for some minutes.

The Caterpillar was the first to speak.

"What size do you want to be?" it asked.

"Oh, I'm not particular as to size," Alice hastily replied; "only one doesn't like changing so often, you know."

"I don't know," said the Caterpillar.

"You'll get used to it in time," says the Caterpillar. With some difficulty, Alice takes the Caterpillar's advice. After three more rounds of what she considers provoking and frustrating questioning, Alice manages to remain calm enough to understand the Caterpillar's cryptic advice. As the Caterpillar—who transforms one outward shape to another yet remains the same entity—knows, size and shape are an illusion to the essential self. Furthermore, Pythagoras's reputed ability to communicate psychically with animals and people is mirrored by the Caterpillar, who reads Alice's thoughts.

In contrast to the spiritual Caterpillar, we have the spherical figure of Father William, in a poem recited by Alice. This preposterous character is easily recognizable as one of Carroll's most frequently satirized colleagues: Benjamin Jowett (1817–1893), the Oxford Regius Professor of Greek and the foremost translator of Plato in his time. Tenniel's illustrations of Father William are very much caricatures of Jowett and appear to have been based on Carroll's own photograph of the professor.

Alice said nothing: she had never been so much contradicted in her life before, and she felt that she was losing her temper.

"Are you content now?" said the Caterpillar.

"Well, I should like to be a *little* larger, sir, if you wouldn't mind," said Alice: "three inches is such a wretched height to be."

"It is a very good height indeed!" said the Caterpillar angrily, rearing itself upright as it spoke (it was exactly three inches high).

"But I'm not used to it!" pleaded poor Alice in a piteous tone. And she thought of herself, "I wish the creatures wouldn't be so easily offended!"

"You'll get used to it in time," said the Caterpillar; and it put the hookah into its mouth and began smoking again.

This time Alice waited patiently until it chose to speak again. In a minute or two the Caterpillar took the hookah out of its mouth and yawned once or twice, and shook itself. Then it got down off the mushroom, and crawled away in the grass, merely remarking as it went, "One side will make you grow taller, and the other side will make you grow shorter."

"You Are Old, Father William" is a parody of the popular "The Old Man's Comforts and How He Gained Them," a poem of the hopelessly moralizing sort frequently taught to "improve" schoolchildren's minds. It was written by the poet laureate Robert Southey (1774–1843), who today is less remembered for his verse than for having written the first published version of "Goldilocks."

The poem and its lampoon begin similarly—" 'You are old, Father William,' the young man cried," goes Southey's version—and have identical refrains: "'In the days of my youth,' Father William replied." However, Southey's didactic poem then embarks on a tiresome list of virtues, while Carroll's entertains with a nonsense poem about an eccentric old man who "took to the law" and balanced an eel on his nose

Benjamin Jowett was seen by conservatives like Carroll as a dangerously liberal and reform-minded figure who was allied with Dean Henry Liddell and Arthur Stanley. Entrenched conservative forces at Oxford blocked Jowett's appointment as master of Balliol College in 1854, but in 1855, they were unable to prevent his appointment by

Prime Minister Palmerston as Regius Professor of Greek. However, those same forces voted to withhold a reasonable salary for the professorship over the next decade. During this period, Jowett became a lightning rod for both pro-reform and anti-reform factions.

In 1860, there were attempts to charge Jowett with heresy in three trials in three different courts. In a later squib, "The New Method of Evaluation, as Applied to π " (1865), one of several of his anti-Jowett satires disguised as mathematical theses, Carroll refers to these attempts to indict Jowett and suggests, "In an earlier age of mathematics J"— Jowett—"would probably have been referred to rectangular axes, and divided into two unequal parts." Or as the Queen of Hearts might put it, "Off with his head!"

"One side of *what*? The other side of *what*?" thought Alice to herself.

"Of the mushroom," said the Caterpillar, just as if she had asked it aloud; and in another moment it was out of sight.

Alice remained looking thoughtfully at the mushroom for a minute, trying to make out which were the two sides of it; and, as it was perfectly round, she found this a very difficult question. However, at last she stretched her arms round it as far as they would go, and broke off a bit of the edge with each hand.

"And now which is which?" she said to herself, and nibbled a little of the right-hand bit to try the effect. The next moment she felt a violent blow underneath her chin: it had struck her foot!

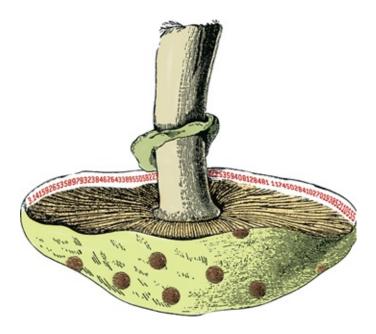
MUSHROOM π The Caterpillar's mushroom is in itself a conundrum. Alice is informed that one side will make her larger and the other, shorter. Since the "perfectly round" mushroom has no immediately discernible sides, the Caterpillar's advice is another piece of apparent nonsense that Alice earlier might have dismissed.

Metaphorically and literally, the implication is that the mushroom is "food for thought" (which was, as we saw earlier, the title of another squib by Carroll). Consequently, Alice now perceives the Caterpillar's advice as a puzzle, and seriously attempts to solve it.

A clue to this puzzle of the mushroom may be found in a related satire. In the same year as the publication of *Wonderland*, Carroll published his political-mathematical squib "The New Method of Evaluation, as Applied to π ," with the introductory verse quotation "Little Jack Horner *Sat in a corner*, Eating a Christmas Pie."

In this pamphlet, Carroll states that the problem of evaluating π , rather than being a strictly arithmetic problem, "is in reality a dynamical problem," and the Jack Horner rhyme is a reference to the mathematician William George Horner and his 1819 paper "A New Method of Solving Numerical Equations of All Orders, by Continuous Approximation."

Carroll's own "New Method" was in fact a politically motivated attack on the aforementioned Benjamin Jowett, the professor of Greek. The "evaluation" for Jowett's appropriate salary is estimated by testing a number of absurd calculations for the value of π . We don't need to look far to see that " π " was very much on Carroll's pun-obsessed mind. The pie/ π pun in combination with the "perfectly round" shape of the mushroom inevitably suggested to his mathematician's mind the statistician's pie chart.



The pie chart, or circle graph, was popularized by the Crimean war hero Florence Nightingale, who was a highly accomplished

statistician. She is the subject of a Lewis Carroll poem, "The Path of Roses" (1856). And by circuitous coincidence, Miss Nightingale in her youth had had a distinguished suitor, one Benjamin Jowett—Carroll's pie/ π man.

Squaring the circle was one of the great riddles of antiquity. Though long understood by serious mathematicians as an impossible challenge, it remained a popular pastime for amateur ones in the nineteenth century. Many of these, much to the irritation of Dodgson, continued to write to the popular press with their "discoveries."

In "Simple Facts about Circle-Squaring"—written in 1882 to warn off obsessed amateurs—Dodgson defined "Circle-Squarers" as "all who have attempted to give an *exact* value to the area of a circle, expressed in terms of the square of its radius." As the area of a circle is equal to π^2 units, a square of equal size would have to have a side length of the square root of π ; consequently, the riddle of how to square the circle is essentially the same as finding an exact value for π .

In the mid eighteenth century, mathematicians proved π was an "irrational" number; that is, an infinite non-repeatable decimal. By the publication of *Wonderland*, though, it had not yet been proved that π was also transcendental; that is, non-algebraic and consequently impossible to give an exact value to.

"Simple Facts" was never published—and in any event would have proved to have been superfluous, for as the Carrollian mathematical scholar Francine Abeles has observed, in that same year, unknown to Dodgson, "Ferdinand Lindemann proved that π was transcendental, thereby settling the ancient Greek problem of squaring the circle. Since π is not algebraic, it is impossible to construct a square having area equal to that of a given circle (or a circle with area equal to that of a given square)."

In Carroll's "New Method of Evaluation, as Applied to π ," resolution is attempted by a number of real and imaginary functions, including the Horner's method "by continuous approximation." And indeed "by continuous approximation" seems a fairly good description of how Alice will eventually manage (bite

by bite) to arrive at her desired height.

Like Father William, Jowett was a wily orator who "took to the law" and managed to outwit his tormentors in court. Through the discovery of a legal error, Jowett was finally granted proper payment as the Regius Professor of Greek. Still, from the perspective of a conservative like the De Quincey Caterpillar—and Charles Dodgson—he was "wrong from beginning to end."

Unfortunately for Carroll and his conservative faction, Jowett had powerful pro-reform allies in government and was also one of Oxford's best and most beloved tutors. Indeed, he was a kind of university-level Mr. Chips of his time. His students became lifelong friends and disciples. As testament to his popularity, a rhyme was recited at Balliol:

First come I. My name is Jowett, There's no knowledge but I know it. I am Master of this College. What I don't know isn't knowledge.

Not only did Jowett win out in the end, he eventually was appointed the vice-chancellor of Oxford University. His funeral was one of the most impressive in Oxford's history, with legions of former students in attendance, many of whom had subsequently attained positions of power throughout the empire.



Benjamin Jowett: Seen as dangerously liberal.

She was a good deal frightened by this very sudden change, but she felt that there was no time to be lost, as she was shrinking rapidly: so she set to work at once to eat some of the other bit. Her chin was pressed so closely against her foot, that there was hardly room to open her mouth; but she did it at last, and managed to swallow a morsel of the left-hand bit.

"Come, my head's free at last!" said Alice in a tone of delight, which changed into alarm in another moment, when she found that her shoulders were nowhere to be found: all she could see, when she looked down, was an immense length of neck, which seemed to rise like a stalk out of a sea of green leaves that lay far below her.

After Alice's recitation of "Father William," the Caterpillar once again engages her in a confusing discussion. This time it concerns Alice's complaint that her constant fluctuations in size confuse her. She is particularly unhappy about being only three inches tall. The Caterpillar

is irritated and dismissive. He is, after all, exactly three inches long himself.

Yet the Caterpillar also ultimately provides Alice with a solution to her predicament when he explains that there is something very peculiar about the large mushroom upon which he is seated: "One side will make you grow taller, and the other side will make you grow shorter."

"With bits" of the mushroom in hand, Alice finally has some control over her physical condition, but she has not yet learned how to use it to her advantage. She must learn to reflect on the Caterpillar's teachings. She does not yet know what he means by "Keep your temper."

She still sees her identity tied to physical being: her name, or her species or the size of her body. Slowly, she learns something of the true identity of her immortal soul: she must learn more about her true self and how to use her power to control her own fate. This will take time and patience. After eating some mushroom, she shrinks to almost nothing, and then, after eating another piece, she grows rapidly and disproportionately. Her body seems to be left behind in the forest undergrowth, while her head on the stalk of a long neck soars up into the treetops. Alice's mind is free at last and soars upward, independent of her body.

"What *can* all that green stuff be?" said Alice. "And where *have* my shoulders got to? And oh, my poor hands, how is it I can't see you?" She was moving them about as she spoke, but no result seemed to follow, except a little shaking among the distant green leaves.

As there seemed to be no chance of getting her hands up to her head, she tried to get her head down to them, and was delighted to find that her neck would bend about easily in any direction, like a serpent. She had just succeeded in curving it down into a graceful zigzag, and was going to dive in among the leaves, which she found to be nothing but the tops of the trees under which she had been wandering, when a sharp hiss made her draw back in a hurry: a large pigeon had flown into her face, and was beating her violently with its wings.

"Serpent!" screamed the Pigeon.

"I'm not a serpent!" said Alice indignantly. "Let me alone!"



She seems to be having an out-of-body experience, what the Eastern mystics commonly described as "astral travelling." This form of meditation after the ingestion of mind-altering substances goes back to the beginnings of human civilization. It was certainly practised by the mystery cults of ancient Greece.

Soaring among the treetops, Alice finds herself attacked and interrogated by an angry pigeon. She undergoes another crisis of identity, and cannot sufficiently defend or define herself. The pigeon accuses her of being a serpent after the eggs in its nest.

Once again, Carroll is giving a mythological gloss to this encounter.

This scene is a parody of the rites practised at the most ancient oracle in the Hellenic world: the sacred grove of Zeus at Dodona. Oxford scholars during Carroll's student years were excited about the recent excavation of the site.

"Serpent, I say again!" repeated the Pigeon, but in a more subdued tone, and added with a kind of sob, "I've tried every way, and nothing seems to suit them!"

"I haven't the least idea what you're talking about," said Alice.

"I've tried the roots of trees, and I've tried banks, and I've tried hedges," the Pigeon went on, without attending to her; "but those serpents! There's no pleasing them!"

Alice was more and more puzzled, but she thought there was no use in saying anything more till the Pigeon had finished.

"As if it wasn't trouble enough hatching the eggs," said the Pigeon; "but I must be on the look-out for serpents night and day! Why, I haven't had a wink of sleep these three weeks!"

"I'm very sorry you've been annoyed," said Alice, who was beginning to see its meaning.

According to Herodotus, the oracle of trees came into being when a black pigeon from Egypt gifted with a human voice came to nest in the tallest tree in Dodona, and commanded attending priests to build a temple to Zeus. The prophecies of the oracle were conveyed by the movements of both the sacred bird and the tree's branches in the wind.

So, just as the pigeon of Dodona nested in the tallest tree in Dodona, Alice's Pigeon has nested in the tallest tree in Wonderland. Once again Alice is confused about her identity, not just because of her size but also because of her body's absurd proportions. And admittedly, with her ridiculously long neck, she looks more like a snake than a child. For a time, Alice forgets the Caterpillar's instructions and loses her temper—and sense of proportion—as she attempts to argue with the Pigeon about her identity.



The pigeon has landed: Zeus at Dodona.

"And just as I'd taken the highest tree in the wood," continued the Pigeon, raising its voice to a shriek, "and just as I was thinking I should be free of them at last, they must needs come wriggling down from the sky! Ugh, Serpent!"

"But I'm not a serpent, I tell you!" said Alice. "I'm a—I'm a—"

"Well! What are you?" said the Pigeon. "I can see you're trying to invent something!"

"I—I'm a little girl," said Alice, rather doubtfully, as she remembered the number of changes she had gone through that day.

"A likely story indeed!" said the Pigeon in a tone of the deepest contempt. "I've seen a good many little girls in my time, but never *one* with such a neck as that! No, no! You're a serpent; and there's no use denying it. I suppose you'll be telling me next that you never tasted an egg!"

A LIKELY STORY Alice's sudden soaring up into the trees is a demonstration of the philosopher's dictum "The mind is the pilot of the soul." She experiences a mental flight into a world that can be

seen only through the eye of the mind. When Alice disputes the Pigeon's assertion that she is a serpent, and says she is a little girl, the Pigeon replies, "A likely story indeed!"

To any student of Plato, the phrase "a likely story," or *eikos mythos*, is immediately recognizable as the philosopher's description of the physical world. It evokes the cardinal doctrine of Platonism that the visible world is only a likeness or model of an eternal reality. In *Timaeus*—Plato's most Pythagorean and mystical work—he explains that in the physical material world, one "should not look for anything more than a likely story." As the physical world is in a constant state of change, the philosopher must not trust this visible illusion of reality but rather focus on what is true and eternal.

The Pigeon's argument with Alice ultimately rests on its quite valid refusal to be deceived by arbitrary classifications determined by humans: "'I've seen a good many little girls in my time, but never one with such a neck as that! No, no! You're a serpent; and there's no denying it. I suppose you'll be telling me next that you never tasted an egg!'

'I have tasted eggs, certainly,' said Alice, who was a very truthful child; 'but little girls eat eggs quite as much as serpents do, you know.' "From Alice's perspective the Pigeon is pursuing a logical fallacy known to philosophers as the "undistributed middle." Just because little girls and serpents are both egg eaters doesn't mean they are both the same species, or are members of the same class.

However, from the perspective of a brooding pigeon intent on guarding her eggs, any long-necked egg-eating creature might legitimately be classified as a species or class of serpent. Any other secondary characteristics that differentiate serpents from little girls are logically and practically irrelevant to the Pigeon.

In describing Alice's neck as being "like a serpent," Carroll may be hinting at a connection to the neck-serpent and Pythagoras. Despite Alice's claims to the contrary, the Pigeon insists she is "a kind of serpent": she is a disciple of Pythagoras whose cult employs the symbol of a serpent coiled about an egg—to represent the creation of time and space.

After some time spent swooping through the forest, Alice once again comes down to earth, and disentangling herself from the trees, she manages to bring herself "down to her usual height" and is once again on her way.

Talking to herself, Alice says, "Come, there's half my plan done now!" But of course Alice is not anywhere near halfway there. Nevertheless, she has at last achieved a sense of proportion and a sense of herself despite changes in physical size and shape. And she is in complete agreement with Pythagoras himself, who once observed, "The beginning is half the whole," or, as it was put later by the Roman poet Horace, "Well begun is half done."



The creation of time and space: Symbol of the cult of Pythagoras.

At one point in their dispute, the Pigeon provokes Alice: "Well! What are you?...I can see you're trying to invent something!" This interjection is something of a riddle that can be answered only by understanding it as a mythological allusion.

As already observed, Carroll has assigned Alice and her sisters the conflated mythological identity of the three Muses-Fates-Furies. In *Wonderland*'s prelude poem, we are told the "cruel Three" are indeed Fates, but they are also the inspirational muses and the source of this fairy tale. They are "Memory's mystic band": the Muses, whose mother is the goddess Mnemosyne, or Memory.

The Pigeon's taunt about "trying to invent something!" is an allusion to the old truism "Necessity is the mother of invention." In Greek mythology, the goddess known as Ananke, or Necessity, is the mother of the Fates; Alice's particular identity as a Fate was Secunda, or Lachesis, meaning "She who allots," and who is, as Plato tells us, "the maiden daughter of Necessity."

"I have tasted eggs, certainly," said Alice, who was a very truthful child; "but little girls eat eggs quite as much as serpents do, you know."

"I don't believe it," said the Pigeon; "but if they do, why then they're a kind of serpent, that's all I can say."

This was such a new idea to Alice, that she was quite silent for a minute or two, which gave the Pigeon the opportunity of adding, "You're looking for eggs, I know *that* well enough; and what does it matter to me whether you're a little girl or a serpent?"

"It matters a good deal to *me*," said Alice hastily; "but I'm not looking for eggs, as it happens; and if I was, I shouldn't want *yours*: I don't like them raw."

"Well, be off, then!" said the Pigeon in a sulky tone, as it settled down again into its nest. Alice crouched down among the trees as well as she could, for her neck kept getting entangled among the branches, and every now and then she had to stop and untwist it. After a while she remembered that she still held the pieces of mushroom in her hands, and she set to work very carefully, nibbling first at one and then at the other, and growing sometimes taller and sometimes shorter, until she had succeeded in bringing herself down to her usual height.



Mother of the Muses: Mnemosyne, by Dante Gabriel Rossetti, 1881.

After this debate about identity, Alice begins once again to experiment with—or measure and allot herself—the portions of her magic mushroom: nibbling a bit of one, then a bit of the other, until she reaches a satisfactory size and proportion. Slowly but surely she has gained some control. She no longer feels her identity is threatened by these rapid physical transformations, and knows she can use her powers to adapt to whatever context she finds herself in. No longer confused by her physical appearance, she begins to understand that at the deepest level of her immortal soul, she increasingly moves toward becoming the mistress of her own fate.

It was so long since she had been anything near the right size, that it felt quite strange at first; but she got used to it in a few minutes, and began talking to herself, as usual. "Come, there's half my plan done now! How puzzling all these changes are! I'm never sure what I'm going to be, from one minute to another! However, I've got back to my right size: the next thing is, to get into that beautiful garden—how is that to be done, I wonder?" As she said this, she came suddenly upon an open place, with a little house in it about four feet high. "Whoever lives there," thought Alice, "it'll never do to come upon them this size: why, I should frighten them out of their wits!" So she began nibbling at the right-hand bit again, and did not venture to go near the house till she had brought herself down to nine inches high.

Chapter 6: Pig and Pepper

"We're all mad here."





Inspirational vapours: The Priestess of Delphi, by John Collier, 1891.

THE KITCHEN ORACLE Apollo, the god of knowledge, was the divinity most frequently portrayed in art, architecture and literature in Oxford. Apollo was also the god of prophecy, and his sanctuary at Delphi was the most respected oracle of the ancient world. Consequently, it was something of an Oxford tradition for classically educated students and dons to make comic allusions to the Delphic oracle in political pamphlets and squibs.

One such pamphlet was Lewis Carroll's "The Elections to the Hebdomadal Council," published only a few months after *Wonderland*. It portrays the university's governing council as an absurd and disastrously inept Delphic oracle. Pointedly quoting one of the council's more convoluted proclamations, Carroll compares it to the obscure and ambiguous prophecies of Delphi, and concludes: "So says the oracle, and, for myself, I / Must say it beats to fits the one at Delphi!"

PIG AND PEPPER.

For a minute or two she stood looking at the house, and wondering what to do next, when suddenly a footman in livery came running out of the wood—(she considered him to be a footman because he was in livery: otherwise, judging by his face only, she would have called him a fish)—and rapped loudly at the door with his knuckles. It was opened by another footman in livery, with a round face, and large eyes like a frog; and both footmen, Alice noticed, had powdered hair that curled all over their heads. She felt very curious to know what it was all about, and crept a little way out of the wood to listen.

The Fish-Footman began by producing from under his arm a great letter, nearly as large as himself, and this he handed over to the other, saying, in a solemn tone, "For the Duchess. An invitation from the Queen to play croquet." The Frog-Footman repeated, in the same solemn tone, only changing the order of the words a little, "From the Queen. An invitation for the Duchess to play croquet."

Then they both bowed low, and their curls got entangled together.

Alice laughed so much at this, that she had to run back into the

wood for fear of their hearing her; and, when she next peeped out, the Fish-Footman was gone, and the other was sitting on the ground near the door, staring stupidly up into the sky.

Alice went timidly up to the door, and knocked.

"There's no sort of use in knocking," said the Footman, "and that for two reasons. First, because I'm on the same side of the door as you are; secondly, because they're making such a noise inside, no one could possibly hear you." And certainly there was a most extraordinary noise going on within—a constant howling and sneezing, and every now and then a great crash, as if a dish or kettle had been broken to pieces.

"Please, then," said Alice, "how am I to get in?"

"There might be some sense in your knocking," the Footman went on without attending to her, "if we had the door between us. For instance, if you were inside, you might knock, and I could let you out, you know." He was looking up into the sky all the time he was speaking, and this Alice thought decidedly uncivil. "But perhaps he can't help it," she said to herself; "his eyes are so very nearly at the top of his head. But at any rate he might answer questions.—How am I to get in?" she repeated, aloud.

"I shall sit here," the Footman remarked, "till tomorrow—"

At this moment the door of the house opened, and a large plate came skimming out, straight at the Footman's head: it just grazed his nose, and broke to pieces against one of the trees behind him.

"—or next day, maybe," the Footman continued in the same tone, exactly as if nothing had happened.

"How am I to get in?" asked Alice again, in a louder tone.

"Are you to get in at all?" said the Footman. "That's the first question, you know."

It was, no doubt: only Alice did not like to be told so. "It's really dreadful," she muttered to herself, "the way all the creatures argue. It's enough to drive one crazy!"

The Footman seemed to think this a good opportunity for repeating his remark, with variations. "I shall sit here," he said, "on and off, for days and days."

"But what am I to do?" said Alice.

"Anything you like," said the Footman, and began whistling.

"Oh, there's no use in talking to him," said Alice desperately:
"he's perfectly idiotic!" And she opened the door and went in.

In Wonderland's Duchess's kitchen, Lewis Carroll has created a comic parody of the oracle of Apollo at Delphi gone badly wrong. Here and elsewhere (as in *The Hunting of the Snark: An Agony in Eight Fits*), Carroll uses the word *fit* in its archaic sense of "a fragment or part of a poem or song," but of course the word also implies its common meaning of "a seizure or convulsion."

In the ancient temple at Delphi, a prophetess called Pythia sat on a three-legged stool and inhaled vapours from a great cauldron filled with a fragrant broth of laurel leaves and narcotic herbs. The cauldron was tended by the priestess of Hestia, goddess of the hearth. These vapours inspired Pythia to speak in tongues, and from these utterances came the enigmatic, riddling verses that were the prophetic "fits" of the oracle.

In Wonderland's kitchen, the Duchess sits on a three-legged stool inhaling the smoke and pepper from a great cauldron filled with a noxious broth. The cauldron and hearth are tended by the cook. These vapours of smoke and pepper inspire the Duchess to utter nonsensical riddling verses that are more like fits of rage than prophesies.

The door led right into a large kitchen, which was full of smoke from one end to the other: the Duchess was sitting on a three-legged stool in the middle, nursing a baby; the cook was leaning over the fire, stirring a large cauldron which seemed to be full of soup.

"There's certainly too much pepper in that soup!" Alice said to herself, as well as she could for sneezing.

There was certainly too much of it in the air. Even the Duchess sneezed occasionally; and as for the baby, it was sneezing and howling alternately without a moment's pause. The only things in the kitchen that did not sneeze, were the cook, and a large cat which was sitting on the hearth and grinning from ear to ear.

"Please would you tell me," said Alice, a little timidly, for she was not quite sure whether it was good manners for her to speak first, "why your cat grins like that?"

"It's a Cheshire cat," said the Duchess, "and that's why. Pig!"



The Duchess and the cook have the opposite temperaments expected of the spiritual and inspiring priestess of Apollo and the gentle and caring priestess of Hestia. And yet the Duchess is comparable to Pythia in many ways. The title Duchess also suggests a pun on the official name of the ancient Greek high priestess Dadochos (meaning "the torchbearing priestess"), who reveals the mysteries. And the cook and Hestia's priestess are certainly similar in their mutual duties of tending the hearths in the inner sanctums.

Most significantly, the Duchess is a prophetess of sorts. And her baby can easily be interpreted as a manifestation of her predictions. When the Duchess screams "Pig!" over her curious backward-evolving child, it does indeed become a pig.

Nor is this child-pig or pig-child allusion arbitrary. The most common offering made by supplicants to the oracle at Delphi was a pig, and when the sacrificial pig was offered up, it was ceremonially identified as "a child of the hearth of Athens" (or Corinth, etc., depending on the origin of the supplicant).

Beyond these allusions to the Delphic oracle and to classical history and mythology, Carroll's contemporaries would have recognized contemporary events and individuals being satirized in the episode in the Duchess's kitchen.

The real-life Oxford counterpart of both the temple of the oracle at Delphi and the Duchess's kitchen is one of the most easily identified landmarks portrayed in the fairy tale. This is one of the oldest buildings at Oxford: Christ Church's great kitchen. Built by Cardinal Wolsey during the reign of Henry VIII, the kitchen is considered one of the ancient wonders of Christ Church. For most of its history, it had a massive hearth for the roasting of entire pigs, and like the Duchess's kitchen was poorly ventilated and frequently filled with smoke.

She said the last word with such sudden violence that Alice quite jumped; but she saw in another moment that it was addressed to the baby, and not to her, so she took courage, and went on again:—

"I didn't know that Cheshire cats always grinned; in fact, I didn't know that cats could grin."

"They all can," said the Duchess; "and most of 'em do."

"I don't know of any that do," Alice said very politely, feeling quite pleased to have got into a conversation.

"You don't know much," said the Duchess; "and that's a fact."

Alice did not at all like the tone of this remark, and thought it would be as well to introduce some other subject of conversation. While she was trying to fix on one, the cook took the cauldron of soup off the fire, and at once set to work throwing everything within her reach at the Duchess and the baby—the fire-irons came first; then followed a shower of saucepans, plates, and dishes. The Duchess took no notice of them even when they hit her; and the baby was howling so much already, that it was quite impossible to say whether the blows hurt it or not.



Hell of a kitchen: Cooking at Christ Church.

"Oh, *please* mind what you're doing!" cried Alice, jumping up and down in an agony of terror. "Oh, there goes his *precious* nose!", as an unusually large saucepan flew close by it, and very nearly carried it off.

"If everybody minded their own business," the Duchess said in a hoarse growl, "the world would go round a deal faster than it does."

"Which would *not* be an advantage," said Alice, who felt very glad to get an opportunity of showing off a little of her knowledge. "Just think of what work it would make with the day and night! You see the earth takes twenty-four hours to turn round on its axis—"

"Talking of axes," said the Duchess, "chop off her head!"

Alice glanced rather anxiously at the cook, to see if she meant to take the hint; but the cook was busily stirring the soup, and seemed not to be listening, so she went on again: "Twenty-four hours, I *think*; or is it twelve? I—"

"Oh, don't bother *me*," said the Duchess. "I never could abide figures!" And with that she began nursing her child again, singing a sort of lullaby to it as she did so, and giving it a violent shake at the end of every line:—



Samuel Wilberforce: Oily and argumentative.

The great kitchen was also the one part of the college that fell directly under the authority of the bishop of Oxford, Samuel Wilberforce (the son of the anti-slavery Great Emancipator, William Wilberforce). The bishop was one of the most vociferous ecclesiastic orators of his time and became popularly known as Holy Terror Wilberforce. To political pundits and parliamentarians, on the other hand, he was known as Soapy Sam, after Benjamin Disraeli's devastatingly erudite description of

his debating style as "unctuous, oleaginous, saponaceous." And as Soapy Sam, Bishop Samuel Wilberforce (1805–1873) was the perfect model for the logic-chopping, moralizing, argumentative Ugly Duchess. In 1860, Wilberforce took a leading role in a historic event in intellectual history, comparable to the confrontation between Galileo and the Pope over the nature of the universe. This was the famous Oxford evolution debate, in which the anti-evolution Wilberforce locked horns with the proevolution Thomas Henry Huxley.

"Speak roughly to your little boy, And beat him when he sneezes: He only does it to annoy, Because he knows it teases."

CHORUS

(in which the cook and the baby joined):—

"Wow! wow! wow!"

While the Duchess sang the second verse of the song, she kept tossing the baby violently up and down, and the poor little thing howled so, that Alice could hardly hear the words:—

"I speak severely to my boy, I beat him when he sneezes; For he can thoroughly enjoy The pepper when he pleases!"

CHORUS

"Wow! wow! wow!"





Two views of Richard Owen: Tried to stir up debate.

The Duchess's cook is based on one of the leading anatomists of the day, Sir Richard Owen (1804–1892), who served as the bishop's adviser. It was Owen who cooked up the anti-evolution arguments for Wilberforce. Much to Owen's irritation, though, the bishop failed to comprehend and coherently argue Owen's position on Darwin's theories.

"Here! You may nurse it a bit, if you like!" the Duchess said to Alice, flinging the baby at her as she spoke. "I must go and get ready to play croquet with the Queen," and she hurried out of the room. The cook threw a frying-pan after her as she went out, but it just missed her.

Alice caught the baby with some difficulty, as it was a queer-shaped little creature, and held out its arms and legs in all directions, "just like a star-fish," thought Alice. The poor little thing was snorting like a steam-engine when she caught it, and kept doubling itself up and straightening itself out again, so that altogether, for the first minute or two, it was as much as she could do to hold it.

As soon as she had made out the proper way of nursing it (which was to twist it up into a sort of knot, and then keep tight hold of its right ear and left foot, so as to prevent its undoing itself), she carried it out into the open air. "If I don't take this child away with me," thought Alice, "they're sure to kill it in a day or two. Wouldn't it be murder to leave it behind?" She said the last words out loud, and the little thing grunted in reply (it had left off sneezing by this time). "Don't grunt," said Alice; "that's not at all a proper way of expressing yourself."

Famous as the anatomist who coined the word *dinosaur*, and later the founder of the Natural History Museum in South Kensington, Owen was sufficiently celebrated to be caricatured regularly in the press. He appears not only in *Wonderland* but in another children's classic of the time, Charles Kingsley's *The Water-Babies*.

Owen was an influential figure in the scientific establishment, but an extremely disagreeable character. In Darwin, Owen and Wilberforce had a common enemy; however, Owen was no friend of the bishop, and was as likely to be in dispute with Wilberforce as with Darwin. In his fantastic "Kitchen of Creation," Carroll has the cook and the Duchess arguing about the contents of a mad biological soup.

In this kitchen oracle, evolution has gone berserk. Fish-frog-footmen in livery seem to have just stepped out of the primordial ooze. A constantly shape-shifting baby appears to demonstrate survival of the fittest by preferring beatings to affection. Strangest of all, Alice's attempts to nurse this child result in a reverse form of evolution: from a boy into a pig.

This surreal transformation is a typical Carrollian riddle and charade. Carroll is playing a word-chain game that he himself invented (and later published in *Vanity Fair*) called Doublets. Two words of the same length

are chosen, and the player must make one word evolve into another by means of link (or "missing link") words created by changing a single letter to form each new link-word.

In *Vanity Fair*, Carroll asked his readers to "Evolve MAN from APE," then supplied the answer: *APE-are-ere-err-ear-mar-MAN*. Among the multitude of Doublet transformations were "Change FISH to BIRD," "Save LION from LAMB," "Crown TIGER with ROSES," and "Change GRUB to MOTH." The rules of Doublets are like those of genetics, by which one species evolves into another by one small change after the other in a chain of DNA molecules.



Owen and Huxley as depicted in The Water-Babies.

The baby grunted again, and Alice looked very anxiously into its face to see what was the matter with it. There could be no doubt that it had a very turn-up nose, much more like a snout than a real nose: also its eyes were getting extremely small for a baby: altogether Alice did not like the look of the thing at all. "But perhaps it was only sobbing," she thought, and looked into its eyes again, to see if there were any tears.

No, there were no tears. "If you're going to turn into a pig, my dear," said Alice, seriously, "I'll have nothing more to do with you. Mind now!" The poor little thing sobbed again (or grunted, it was impossible to say which), and they went on for some while in silence.

Alice was just beginning to think to herself, "Now, what am I to do with this creature when I get it home?" when it grunted again, so violently, that she looked down into its face in some alarm. This time there could be *no* mistake about it: it was neither more nor less than a pig, and she felt that it would be quite absurd for her to carry it further.

Carroll also gives the reader an obscure hint of the nature of his game when the Duchess chants her witch's spell over the child that ends in "Wow! wow!" This is a cryptic phonetic pun on the word Doublets: wow spelled out aloud is "Double-you oh double-you." And with this she predicts the verbal evolution of boy into pig; that is, *BOY-bog-big-PIG*.



Speaking in tongues: Detail from Consulting the Oracle, by John William Waterhouse, 1884.

HE WAS THE BOMB The theosophical candidate for the Ugly Duchess is Philippus Aureolus Theophrastus Bombastus von Hohenheim, aka Paracelsus of Zurich (1493–1541), a Swiss physician, botanist, alchemist, astrologer and occultist. Paracelsus gained a reputation for being arrogant toward his colleagues, and some writers suggest that "Theophrastus Bombastus" is the source of the word *bombastic* to describe a pompous, pretentious, verbose and self-aggrandizing character. This certainly describes the Ugly Duchess, but perhaps it is best to allow Paracelsus to speak for himself:

"I am Theophrastus, and greater than those whom you liken me; I am Theophrastus, and in addition I am *monarcha medicorum* and I can prove to you what you cannot prove.... You are not learned or experienced enough to refute even one word of mine.... Let me tell you this: every little hair on my neck knows more than you and all your scribes, and my shoe buckles are more learned than your Galen and Avicenna, and my beard has more experience than all your high colleges."



Paracelsus: This is a copy of the portrait by Matsys, now lost.

So she set the little creature down, and felt quite relieved to see it trot away quietly into the wood. "If it had grown up," she said to herself, "it would have made a dreadfully ugly child: but it makes rather a handsome pig, I think." And she began thinking over other children she knew, who might do very well as pigs, and was just saying to herself, "if one only knew the right way to change them —" when she was a little startled by seeing the Cheshire Cat sitting on a bough of a tree a few yards off.

FACE OF THE DUCHESS The National Gallery, London contains the extremely grotesque *An Old Woman* (c. 1513), by the Flemish artist Quentin Matsys (1466–1530), that in the twentieth century has become widely known as "The Ugly Duchess" because it is believed to be John Tenniel's model for his illustration of that Wonderland character. Although it has been frequently argued that the portrait is of Margaret Countess of Tyrol (1318–1369)—a.k.a. Margarete Maultasch, "the ugliest princess in history"—this is unlikely. To begin with, it was not a portrait drawn from life as it was painted a century and a half after Margaret's death. Furthermore, chronicles written during the countess's lifetime describe her as being beautiful.

The Countess's scandalous epithet "Maultasch" literally translates

as "bag mouth" and carries the meaning "ugly whore." This slander was spread by enemies who wished to usurp her lands, and used their influence to have her excommunicated as an immoral woman for divorcing her first husband. Over time the nickname and others like it resulted in folk tales about an ugly and deformed countess that were eventually recorded in Jacob Grimm's *German Sagas* (1816).

Nonetheless, although Matsys's painting is not a portrait of the last Countess of Tyrol, there is a convincing case for claiming it as the inspiration for John Tenniel's drawings of the Ugly Duchess. And strangely enough, another of this Flemish artist's paintings is directly linked to our theosophical candidate for the Ugly Duchess. Quentin Matsys was commissioned to paint a portrait of his famous contemporary: the celebrated alchemical doctor Paracelsus of Zurich.



An Old Woman: More Duchess than Countess.

Alice's first view of the Duchess's kitchen is from its door, where she observes those two bizarre examples of evolution gone wrong: the Fish-Footman and the Frog-Footman. Their names are literal descriptions of the creatures: one is half fish and half man, the other is half frog and half man; both measure one foot in height.

Carroll's first hint is perhaps found in the initial exchange at the kitchen door: "The Fish-Footman began by producing from under his

arm a great letter, nearly as large as himself, and this he handed over to the other." This sounds perilously close to a restating of the rules of Doublets.

The Cat only grinned when it saw Alice. It looked good-natured, she thought: still it had very long claws and a great many teeth, so she felt that it ought to be treated with respect.

"Cheshire Puss," she began, rather timidly, as she did not at all know whether it would like the name: however, it only grinned a little wider. "Come, it's pleased so far," thought Alice, and she went on. "Would you tell me, please, which way I ought to go from here?"

"That depends a good deal on where you want to get to," said the Cat.

"I don't much care where—" said Alice.

"Then it doesn't matter which way you go," said the Cat.

"—so long as I get somewhere," Alice added as an explanation.

Not wishing to make the charade too obvious, Carroll has the Frog-Footman, when he twice says what the letter is about, "changing the order of the words a little" (rather than changing the letters). For, by passing "a great letter, nearly as large as himself," the Fish-Footman could easily be verbally transformed into the Frog-Footman: FISH-fist-fiat-flag-flog-FROG.



"Oh, you're sure to do that," said the Cat, "if you only walk long enough."

Alice felt that this could not be denied, so she tried another question. "What sort of people live about here?"

"In *that* direction," the Cat said, waving its right paw round, "lives a Hatter: and in *that* direction," waving the other paw, "lives a March Hare. Visit either you like: they're both mad."

"But I don't want to go among mad people," Alice remarked.

"Oh, you can't help that," said the Cat: "we're all mad here. I'm mad. You're mad."

The power of Carroll's word game is forcefully demonstrated with the sudden dramatic reappearance of the Cheshire Cat after Alice sets the pig free in the woods. Carroll's game of Doublets goes some way toward explaining the Cheshire Cat's ability to vanish and reappear from head to tail and back again. In fact, in his introduction to his collection of Doublets, Carroll provides his readers with exactly this example of changing *Head* into *Tail*.

And so, in Wonderland, the appearance and disappearance of the Cheshire Cat is manifest in the word chain *HEAD-heal-teal-tell-tall-TAIL*. We can solve the conundrum of the cat's slowly vanishing from tail to

grin with the word chain *TAIL-tall-tell-teal-team-tram-trim-grim-GRIN* and his final reappearance from a grin to a floating head with *GRIN-grim-trim-tram-teal-heal-HEAD*.

Still, cats at Oxford are not hard to find. Christ Church's coat of arms is adorned with four guardian cat faces looking down on the gardens of academia. To differentiate the Christ Church colleges of Oxford and Cambridge, Oxford employs the abbreviation Ch.Ch. Consequently, Carroll and his colleagues commonly referred to themselves as Ch. Ch. men; meanwhile, the Ch.Ch. canons (as represented by the cat faces on the coat of arms) by tradition became known as the Ch.Ch. cats: the watchful moral guardians of the university.

It is not a huge leap from "Ch.Ch. cat" to "Cheshire Cat," but this still doesn't tell us which Ch.Ch. canon is the definitive Cheshire Cat. Alice supplies us with a clue by rather formally addressing the cat as "Cheshire Puss." Why the capital on Puss? Why Puss at all? Only one Ch.Ch. canon, as Alice observes, "would like the name," because his name was Pusey.

"How do you know I'm mad?" said Alice.

"You must be," said the Cat, "or you wouldn't have come here."

Alice didn't think that proved it at all; however, she went on "And how do you know that you're mad?"

"To begin with," said the Cat, "a dog's not mad. You grant that?" "I suppose so," said Alice.

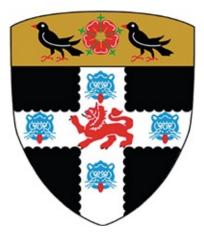
"Well, then," the Cat went on, "you see, a dog growls when it's angry, and wags its tail when it's pleased. Now I growl when I'm pleased, and wag my tail when I'm angry. Therefore I'm mad."

"I call it purring, not growling," said Alice.

"Call it what you like," said the Cat. "Do you play croquet with the Queen to-day?"



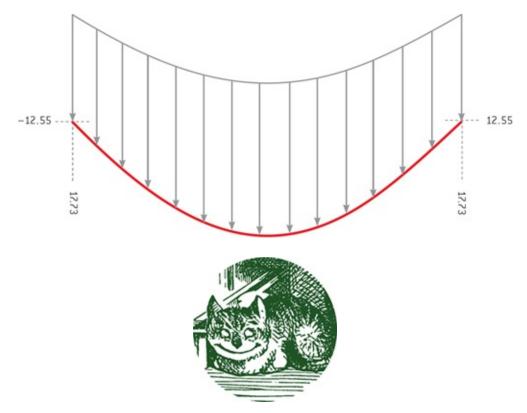
Edward Bouverie Pusey: Awarded Carroll a lifetime position at Christ Church.



Christ Church's coat of arms: The blue cats are leopards, representing the de la Pole Dukes of Suffolk. See this page for the full coat of arms.

The Cheshire Cat was the Reverend Dr. EDWARD BOUVERIE PUSEY (1800–1882), Regius Professor of Hebrew and Lewis Carroll's mentor and patron. Canon Pusey was the ecclesiastical and political focus of ultraconservatism at Oxford. And just as the Cheshire Cat was the Duchess's cat, so Pusey was nominally under the authority of Oxford's Duchess, Bishop Wilberforce. Pusey and Wilberforce were the two most influential figures in the Anglican clergy at Oxford. As a friend of Carroll's High Church father from their own student years at Christ Church, Canon

Pusey awarded—through the old system of privilege and patronage—the young Charles Dodgson a lifelong position at Christ Church before he'd achieved his bachelor's degree.



The Catenary and the Cat.

In his pseudo-mathematical satire, "The New Method of Evaluation, as Applied to π ," wherein people take on geometric identities, Carroll investigates "the locus of EBP [Edward Bouverie Pusey]: this was found to be a species of Catenary, called the Patristic Catenary." Today the term *patristic catenary* (meaning "chain of the fathers") is obscure, but it was not so in Carroll's time, when its Latin translation, *catena patrum*, referred to quotations from the church Fathers commenting on scripture. Canon Pusey was famously the greatest authority on the teachings of the Fathers of the church, and widely celebrated as the ultimate "patristic catenary."

Even more revealingly, in geometry, a catenary is a curve made by a chain suspended between two points at different levels, such as one finds in a suspension, or catenary, bridge. Not only has Carroll with this clue provided us with proof of the identity of Wonderland's Cheshire Cat, but

the shape of a catenary is almost perfectly described by Alice as "a grin without a cat!"

"I should like it very much," said Alice, "but I haven't been invited yet."

"You'll see me there," said the Cat, and vanished.

Alice was not much surprised at this, she was getting so used to queer things happening. While she was looking at the place where it had been, it suddenly appeared again.

"By-the-bye, what became of the baby?" said the Cat. "I'd nearly forgotten to ask."

"It turned into a pig," Alice quietly said, just as if it had come back in a natural way.

"I thought it would," said the Cat, and vanished again.

With this, Carroll gives us a mathematician's solution to the ancient unsolved riddle of the Cheshire Cat's grin:

RIDDLE: What kind of cat can grin?

ANSWER: A Catenary.

We are not yet quite done with the Cheshire Cat. If we revisit the classical and mythological allusions in this chapter, Carroll appears to link the smiling, enigmatic Cheshire Cat with the smiling, enigmatic Sphinx at Delphi. How does this figure into the story of Alice's adventures?

The Sphinx is closely linked to the oracle of Delphi in myth and in history. The largest single surviving sculpture discovered at the sanctuary of Delphi is a gigantic statue of a Sphinx that once stood on a pillar and guarded the sacred path that led to the oracle in the Temple of Apollo. The motto engraved above the temple's entrance, "Know thyself," provides a link to both the Sphinx and Wonderland's Cheshire Cat.

In classical mythology, the Sphinx—like the Cheshire Cat—poses riddles to unwary travellers at a fork in the road. Most famously, it encountered Oedipus, a hero whose tragic fate as a child had been

predicted by the prophetess at Delphi. In an attempt to change that fate, his mother had abandoned her baby in the wilderness, but Oedipus survived, and was wise enough to answer the famous riddle of the Sphinx. However, he could not change his fate, because he remained confused about his identity. He was doomed because he failed to "know thyself."

Similarly, Alice is confused about her identity and finds she cannot make fully informed choices that will permit her to control her fate. Nor, despite her best efforts, can she save the abused baby from its fate of becoming a pig, and like Oedipus's mother she abandons the pig-child in the wilderness.



Original riddler: The Sphinx, as sculpted in marble circa 560 BC.

Alice waited a little, half expecting to see it again, but it did not appear, and after a minute or two she walked on in the direction in which the March Hare was said to live. "I've seen hatters before," she said to herself; "the March Hare will be much the most interesting, and perhaps as this is May it won't be raving mad—at least not so mad as it was in March." As she said this, she looked up, and there was the Cat again, sitting on a branch of a tree.

"Did you say pig, or fig?" said the Cat.

"I said pig," replied Alice; "and I wish you wouldn't keep appearing and vanishing so suddenly: you make one quite giddy."

"All right," said the Cat; and this time it vanished quite slowly, beginning with the end of the tail, and ending with the grin, which remained some time after the rest of it had gone.

"Well! I've often seen a cat without a grin," thought Alice; "but a grin without a cat! It's the most curious thing I ever saw in my life!"

Also, just as Oedipus encountered the riddling Sphinx at a fork in the road, Alice encounters her riddling Cheshire Cat at a similar junction. There she discovers that no matter which road she chooses to take, she will end up at the same destination, because both paths lead to the same tea party. (A worse fate was to greet Oedipus at the end of *his* journey.)

By means of his allusions to the Delphic oracle, Lewis Carroll was attempting to make one final point about Oxford. The ancient Delphic oracle, inspired by the sun god's celestial fire, induced divine prophecy, whereas the Wonderland oracle's domestic fire brought about sneezing fits. In Wonderland, inspired wisdom is reduced to cookery in the Duchess's kitchen temple. And this was exactly Carroll's view of Oxford's new liberal academic system. He frequently described reforms to modernize and standardize teaching at the university as replacing scholarship with a very base form of cookery.

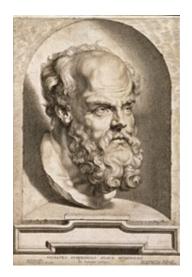
One example of this is found in his novel *Sylvie and Bruno Concluded*, in which Carroll has an old professor speak of the remarkable lack of inspired art and literature to be found in any of the great universities: "All the original genius ... by which our fore-fathers have so advanced human knowledge, must slowly but surely wither away, and give place to a system of Cookery, in which the human mind is a sausage, and all we ask is, how much indigestible stuff can be crammed into it!"

A SOCRATIC CAT The Cheshire Cat's mythological identity as the Sphinx is intertwined with its identity on the philosophical level as SOCRATES (469–399 BC). Certainly, the riddling Sphinx had something in common with that ever-questioning philosophical gadfly. Then, too, the Sphinx is linked to the oracle of Delphi through the legend of Oedipus, while Socrates is linked to the oracle through Pythia's proclamation "Socrates is the wisest of mortal men."

Socrates gained this reputation by questioning everyone and

everything. The Cheshire Cat has a similarly inquiring nature. Socrates proudly described himself as a gadfly provoking the Athenian state—like a lazy horse—into action. In this he is comparable to the Cheshire Cat, whose floating head in the royal garden provokes everybody—including the King and Queen of Hearts as the heads of state. Socrates was sentenced to be executed, and so is the Cheshire Cat.

Described by Plato as "homely, with a snub nose and protruding eyes," Socrates might easily be said to resemble the Cheshire Cat. However, Carroll most closely links the Cheshire Cat to Socrates through his discussion with Alice about the nature of madness and dreams. This discussion is derived from Plato's Socratic dialogue *Theaetetus*.



Socrates: Was he a philosopher, or did he just dream he was one?

In this dialogue, Socrates asks: "How can you determine whether at this moment we are sleeping, and all our thoughts are a dream; or whether we are awake, and talking to one another in the waking state?" It seems that the Cheshire Cat is the only creature to understand that Wonderland is a dream world and that madness is related to the dreaming and waking states of consciousness: "We're all mad here."

Furthermore, the Cheshire Cat's argument that dogs are sane and cats insane is resonant of another Socratic dialogue, in which Socrates presents an equally absurd logical fallacy that "proves"

Euthydemus's father is a dog. And in yet another dialogue, *Phaedrus*, Socrates—like the Cheshire Cat—establishes himself as an authority on insanity in a discussion of the idea of "divine madness" as the source of inspiration for poetry, prophecy, love and philosophy.

In *Wonderland*, the Cheshire Cat gives Alice her choice of madnesses at this fork in the road: one path supposedly leading to the March Hare and the other to the Mad Hatter. This proves to be no choice at all. Fate has decided otherwise, and despite choosing one, she discovers herself in the company of both.

She had not gone much farther before she came in sight of the house of the March Hare: she thought it must be the right house, because the chimneys were shaped like ears and the roof was thatched with fur. It was so large a house, that she did not like to go nearer till she had nibbled some more of the left-hand bit of mushroom, and raised herself to about two feet high: even then she walked up towards it rather timidly, saying to herself "Suppose it should be raving mad after all! I almost wish I'd gone to see the Hatter instead!"

Chapter 7: A Mad Tea-Party

"But what happens when you come to the beginning again?"







A SOCIALIST TEA PARTY " 'Have some wine,' the March Hare said in an

encouraging tone." This is a strange offer to make to the seven-year-old child who has just sat herself down at the table for a tea party. Offering to get a child drunk at a garden party is hardly something the upright Reverend Charles Dodgson would approve of. The offer is immediately nullified, but one must still ask why Lewis Carroll would choose to introduce wine into this fairy tale, unless it was to make a specific point or allusion.

Just as Darwinian evolution was the target of Carroll's satire in the Duchess's kitchen, so the rise of the Christian Socialist Movement is being parodied at the table of the Mad Tea-Party. The movement was established in 1848 to address the grievances of the working class concerning voting rights, working hours, factory conditions, basic education and child labour. Among the most prominent Christian Socialists were authors of socially conscious novels as well as popular Christian tracts, and many were also members of a secret Cambridge University society known as the Apostles.

A MAD TEA-PARTY.

There was a table set out under a tree in front of the house, and the March Hare and the Hatter were having tea at it: a Dormouse was sitting between them, fast asleep, and the other two were using it as a cushion, resting their elbows on it, and talking over its head. "Very uncomfortable for the Dormouse," thought Alice; "only, as it's asleep, I suppose it doesn't mind."

The table was a large one, but the three were all crowded together at one corner of it: "No room! No room!" they cried out when they saw Alice coming. "There's *plenty* of room!" said Alice indignantly, and she sat down in a large arm-chair at one end of the table.

"Have some wine," the March Hare said in an encouraging tone.

Alice looked all round the table, but there was nothing on it but tea. "I don't see any wine," she remarked.

"There isn't any," said the March Hare.

"Then it wasn't very civil of you to offer it," said Alice angrily.

"It wasn't very civil of you to sit down without being invited,"

said the March Hare.

As a caring Christian, Lewis Carroll had some sympathy for their views, but as a conservative he found their impassioned public debates hare-brained and a threat to the stability of the nation. In making them participants of the Mad Tea-Party, Carroll aligns them with the disastrous consequences (as he saw the American Revolution) of the Boston Tea Party.

Carroll conceives Wonderland's tea party as a mad symposium of quarrelling Cambridge philosophers belonging to the Christian Socialist Party—all of whom are avowed teetotallers. This explains why Alice, after being offered wine, is told there is none. Carroll's little joke here is that this symposium (from the Greek for "to drink together") is a philosophers' (wine) drinking party, but the Christian Socialist philosophers' (tea) drinking party is one entirely lacking in spirit. Also, in a phonetic pun on "Mad Tea," Carroll further confirms his opinion of the Christian Socialist party as an "M.T." party—or an "empty" party offering only empty promises.

The Mad Hatter was Charles Kingsley (1819–1875), a Cambridge Christian Socialist, clergyman and author of numerous popular socially conscious novels. Kingsley's vivid portrayal of working-class squalor in the clothing trade in novels such as *Yeast: A Problem* (1848) and *Alton Locke* (1850) awakened the middle classes to the tragic human consequences of the Industrial Revolution.

Among these victims were the hatters. Widespread use of mercury in the shaping of hats resulted in dementia that often manifested in uncontrollable trembling and raving speech, like that of Wonderland's Mad Hatter. "Mad as a hatter" was a common expression long before Carroll's time, but we can easily appreciate why the ultra-conservative Carroll would wish to portray the excitable socialist Kingsley as a ranting and raving Mad Hatter.

"I didn't know it was *your* table," said Alice; "it's laid for a great many more than three."

"Your hair wants cutting," said the Hatter. He had been looking at Alice for some time with great curiosity, and this was his first speech.

"You should learn not to make personal remarks," Alice said with some severity; "it's very rude."

The Hatter opened his eyes very wide on hearing this; but all he *said* was, "Why is a raven like a writing-desk?"

"Come, we shall have some fun now!" thought Alice. "I'm glad they've begun asking riddles—I believe I can guess that," she added aloud.

"Do you mean that you think you can find out the answer to it?" said the March Hare.

"Exactly so," said Alice.

"Then you should say what you mean," the March Hare went on.

"I do," Alice hastily replied; "at least—at least I mean what I say—that's the same thing, you know."



Charles Kingsley: An excitable but not mad socialist.

Kingsley was one of the few clergymen to embrace Darwinian evolution and introduce its ideas into his novels. He was the author of the immensely popular *Water-Babies*, a children's book that was also a satire in support of Darwin's theories. As already noted here, *The Water-*

Babies depicts Sir Richard Owen (the Duchess's cook) examining a water baby in a flask alongside his opponent in the evolution debate, Thomas Huxley.

One very publicly disputed point between Huxley and Owen was whether the brains of apes had a hippocampus minor (now known as the calcar avis), which was thought to set human brains apart. Kingsley satirized the "great hippocampus question" in *The Water-Babies* as the "great hippopotamus test."

It seems likely that Carroll already had the Kingsley satire in mind when Alice initially mistakes the Mouse swimming in the primordial soup of the Pool of Tears for a hippopotamus. Although Carroll remained a sceptic on the subject, his library contained many books on or about Darwinian evolution. Furthermore, Carroll was sufficiently provoked by evolutionary ideas that he invented a board game called Natural Selection.

"Not the same thing a bit!" said the Hatter. "You might just as well say that 'I see what I eat' is the same thing as 'I eat what I see'!"

"You might just as well say," added the March Hare, "that 'I like what I get' is the same thing as 'I get what I like'!"

"You might just as well say," added the Dormouse, who seemed to be talking in his sleep, "that 'I breathe when I sleep' is the same thing as 'I sleep when I breathe'!"

"It is the same thing with you," said the Hatter, and here the conversation dropped, and the party sat silent for a minute, while Alice thought over all she could remember about ravens and writing-desks, which wasn't much.

The Hatter was the first to break the silence. "What day of the month is it?" he said, turning to Alice: he had taken his watch out of his pocket, and was looking at it uneasily, shaking it every now and then, and holding it to his ear.

Alice considered a little, and then said "The fourth."

"Two days wrong!" sighed the Hatter. "I told you butter wouldn't suit the works!" he added looking angrily at the March Hare.



Quadrangle of Trinity College, by William Westall and John Bluck, 1815: Most Apostles came from Trinity, King's and St. John's.



Julius Hare: Clue is in the name.

The Mad Tea-Party's model for the March Hare was Julius Charles Hare (1795–1855), a leading Christian Socialist theological writer. Hare, who had met Goethe and Schiller in his youth, was a bibliophile with a vast library. He was a prolific author who—like the March Hare—was so

painfully fond of hair-splitting digressions that he found it necessary to append a two-hundred-page footnote to one of his publications. Julius Hare's maxim, "Be what you are. This is the first step toward becoming better than you are," might have been good advice to the Wonderland Alice in her own quest for identity.

It appears that Carroll may have been "splitting heirs" in this characterization: Julius had an equally eccentric brother, Augustus William Hare, also a Christian Socialist, and a nephew, Augustus Cuthbert Hare, who read early drafts of *Wonderland* and was a common-room friend of Carroll's at Oxford.

"It was the *best* butter," the March Hare meekly replied.

"Yes, but some crumbs must have got in as well," the Hatter grumbled: "you shouldn't have put it in with the bread-knife."

The March Hare took the watch and looked at it gloomily: then he dipped it into his cup of tea, and looked at it again: but he could think of nothing better to say than his first remark, "It was the best butter, you know."

Alice had been looking over his shoulder with some curiosity. "What a funny watch!" she remarked. "It tells the day of the month, and doesn't tell what o'clock it is!"

"Why should it?" muttered the Hatter. "Does *your* watch tell you what year it is?"

"Of course not," Alice replied very readily: "but that's because it stays the same year for such a long time together."

"Which is just the case with mine," said the Hatter.

The Dormouse, the third member of the Mad Tea-Party, was also a famous Christian Socialist: (John) Frederick Denison Maurice (1805–1872). Through his thoughtful sermons and his writing, Maurice became a provocative and immensely respected Christian thinker, and was the founder of both the Apostles and, with Kingsley, the Christian Socialists. Indeed, Maurice's book *The Kingdom of Christ* (1838) became the theological basis of the movement.

Maurice's other-worldly focus and mild-tempered nature are reflected in his portrayal as the narcoleptic Dormouse. The animal's sleepiness is easily explained. The dormouse is a nocturnal rodent; its name is derived from the French *dormir*, thus "sleeping mouse."

Maurice believed that theology should be a source of unity, not a division, but—like the Dormouse stuffed into the teapot—this mild-mannered church mouse's liberal principles got him into hot water with charges of heresy. However, after a lifetime of controversy, Maurice eventually became a professor of moral philosophy at Cambridge.

Alice felt dreadfully puzzled. The Hatter's remark seemed to have no sort of meaning in it, and yet it was certainly English. "I don't quite understand you," she said, as politely as she could.

"The Dormouse is asleep again," said the Hatter, and he poured a little hot tea upon its nose.

The Dormouse shook its head impatiently, and said, without opening its eyes, "Of course, of course: just what I was going to remark myself."

"Have you guessed the riddle yet?" the Hatter said, turning to Alice again.

"No, I give it up," Alice replied. "What's the answer?"

"I haven't the slightest idea," said the Hatter.

"Nor I," said the March Hare.



F.D. Maurice: Founder of the Apostles.



Robert Fludd: High priest of Rosicrucian mysteries.

TEA AND THEOSOPHY Oxford's theosophical tea party began at the end of the sixteenth century and the dawn of the seventeenth. It was Oxford's Rosicrucian golden age. The theosophical Mad Hatter was the polymath Robert Fludd (1574–1637). A man with a hat so full of bees, he was satirized in his own time as "Trismegistian-Platonick-Rosy-crucian Doctor." Fludd studied the Kabbalah and Paracelsian medicine. He was a noted astrologer, chemist, mathematician and cosmologist and received a doctorate of medicine at Christ Church.

Fludd was the author of numerous publications, including a 1616 tract on the Brotherhood of the Rosy Cross, by which he became known as the "high priest of their mysteries." Fludd's encyclopedic texts were part of an unfinished magnum opus that was an attempt to encompass the whole of human knowledge in a single repository. Just as the Mad Hatter wished to be "on good terms" with Time, Fludd was very much concerned with aspects of chronology and cosmology: the measurement of time and the order of the cosmos.

Fludd's German colleague—and fellow Rosicrucian—Count Michael Maier (1568–1622) was the March Hare. Maier was a German physician and counsellor to the Habsburg Holy Roman

Emperor Rudolf II and had a great interest in alchemy and hermetic philosophy that he shared with his imperial patron. He was an expert Latin grammarian who was a master of dialectics, logic, rhetoric and syllogistic reasoning.

Just as the March Hare appeared in the court of the King of Hearts, Maier visited the court of the English King James I, where he met Fludd within a circle of other British hermetic physicians. Maier was credited with introducing the Order of the Rosy Cross into Britain and with the initiation of Robert Fludd into the order.

When the March Hare reappears in *Through the Looking-Glass* as one of the messengers, we are informed, "'His name is Haigha.' (He pronounced it so as to rhyme with 'mayor.')" Clearly it also rhymes with Maier. Furthermore, in Carroll's Sylvie and Bruno novels, we have a mysterious German professor named Mein Herr: a pun on both March Hare and Herr Maier. Like the March Hare, Mein Herr is some kind of learned lunatic who is linked to "the Man in the Moon." And among Maier's many works was one on lunar observations and another that investigated the causes of and treatments for insanity.



Mein Hare: Michael Maier.

Maier's spectacular engraved illustrated books were held in the highest esteem, as was his commentary on Hermes Trismegistus. Maier's *Arcana arcanissima* incorporates Hermetic interpretation of Greek and Egyptian myths into Rosicrucian literature. In his Latin verse he assumes the pseudonym Hermes Malavici, an anagram of Michael Maierys. The English edition of Maier's *Themis Aurea: The*

Laws of the Fraternity of the Rosie Cross, was dedicated to our theosophical White Rabbit, Elias Ashmole.

Like Lewis Carroll, Maier in his prose and poetry employed erudite word games with Latin anagrams, acrostics and fables with talking animals, and wrote poems in geometric shapes. Maier's alchemical tracts also give us one possible explanation for Carroll's diary notation for significant days or events that gave him great pleasure: "I mark this day with a white stone." According to Maier, the "white stone" was the earthly counterpart of the lapis occultus, or philosopher's stone, that was the object of every alchemist's quest.

The eldest of the participants in the Oxford theosophical tea party was the Dormouse: Sir Francis Bacon (1561–1626)—philosopher, statesman, scientist, lawyer, jurist and author. Carroll's library included Bacon's works in 10 volumes. Like the Dormouse, Bacon became a prosecution witness at more than one trial that ended with a command of "Off with his head!" Later, again like the Dormouse, Bacon was himself suppressed and only just escaped execution.



Francis Bacon: M is for mouse.

Another clue to the Dormouse's identity is implied by his obsession with "everything that begins with an M." In Bacon's utopian novel *New Atlantis* (1627), he mentions that a book written by Solomon is located in New Atlantis. This is "The Book of M," a Rosicrucian treasure reputed to contain all worldly knowledge. And as the Renaissance scholar Frances Yates explained in *The Rosicrucian Enlightenment*: "New Atlantis" was governed by the R.C. [Rosicrucian] Brotherhood, invisibly travelling as 'merchants of light' in the outside world from the invisible college, now called Salomon's House."

TEA NOT WINE On the mythological level, the introduction of wine at the Mad Tea-Party equates it with the ancient Greco-Roman Bacchanalia, a festival held in honour of the god of wine and madness. Worshippers of the Greek gods Dionysus (or Roman Bacchus), Pan (or Roman Faunas) and Seilenos (or Roman Silenus) annually held a mad wine party. The Bacchanalia were held in celebration of a cult of wild and terrifying nymphs and satyrs who tore human and animal victims to pieces and devoured them.

But in this underground world, the March Hare, Mad Hatter and Dormouse all prove to be entirely lacking in wildness. Instead of wine, they drink tea. Instead of raw human flesh, they eat thinly sliced bread and thinly spread butter. They are certainly capable of a considerable degree of eccentric rudeness, but this hardly rises to a terrifying bacchanalian frenzy.



Dionysus: His mysteries were the most mysterious of all.



Pan: A wild and crazy god.

The Mad Hatter is Dionysus, the god of wine and madness. The Dionysian Mysteries were the most secret of all the mysteries and related to living souls' ability to communicate with the souls of the dead. To the Romans, he was Bacchus and presided over the bacchanalian festival. He was known as "the Liberator," bringing freedom from one's normal self through an inspired madness.

The March Hare is Pan, the goat-footed and goat-horned god of frenzy, from whom we get the word panic. This nature spirit closely associated

with the worship of Dionysus was both a wise counsellor and a mad, irrational beast. Like the "mad" March hare of folklore and nature, Pan had a wild unpredictable nature associated with the frenzied spring mating rituals of animals.

Alice sighed wearily. "I think you might do something better with the time," she said, "than waste it in asking riddles that have no answers."

"If you knew Time as well as I do," said the Hatter, "you wouldn't talk about wasting it. It's him."

"I don't know what you mean," said Alice.

"Of course you don't!" the Hatter said, tossing his head contemptuously. "I dare say you never even spoke to Time!"

"Perhaps not," Alice cautiously replied: "but I know I have to beat time when I learn music."

The Dormouse is Seilenos, god of drunkenness. He was the foster father of Dionysus. Like the Dormouse, Seilenos the satyr was snubnosed, pot-bellied, animal-eared and famous for frequently falling asleep at the banquet table. Also like the Dormouse, he was often called upon—woken up, if necessary—to entertain guests with stories and songs.

However, the Mad Tea-Party is essentially the domain of a fourth god: Dionysus's grandfather Cronus (the Roman Saturn), the god of time. Before arriving at the tea party, Alice was primarily concerned with her identity as it was manifest in the physical dimensions of space—height, width, depth—and in maintaining these proportionately. Once at the table, though, she begins to deal with the problem (first voiced to the Caterpillar) of her identity changing with the passage of time: past, present, future.



Seilenos: Often fell asleep during banquets.



Old Father Time: He too is a guest at the tea party.

"Ah! That accounts for it," said the Hatter. "He won't stand beating. Now, if you only kept on good terms with him, he'd do almost anything you liked with the clock. For instance, suppose it were nine o'clock in the morning, just time to begin lessons: you'd only have to whisper a hint to Time, and round goes the clock in a twinkling! Half-past one, time for dinner!"

("I only wish it was," the March Hare said to itself in a whisper.)

"That would be grand, certainly," said Alice thoughtfully: "but then—I shouldn't be hungry for it, you know."

"Not at first, perhaps," said the Hatter: "but you could keep it to half-past one as long as you liked."

"Is that the way you manage?" Alice asked.



Mad wine party: Bacchanalia, by Henryk Siemiradzki, 1890.

THE RIDDLE OF HATTER'S HAT "In this Style: 10/6" is the label attached to the Wonderland Hatter's Hat. Initially, it appears to be a price-tag that in English currency must be read: "ten shilling six pence" or "one-half guinea." Is there any significance in that price? Is it a price tag at all?

Let us begin with the wording of the tag on the hat. Instead of reading "In this Style: 10/6" as "In this Style: 10 shillings 6 pence," we could easily read it as: "In this Style: 10^6 " wherein $10^6 = 1,000,000$. Of course, this could be interpreted as meaning that the Hatter has manufactured one million hats in this style. However, this is not likely and would simply introduce more pointless numbers.

However, we are also told that Alice is 7 that day. Why would Carroll provide us with this number? Most obviously, 7 is the prime number used for determining the number of weeks in any given number of days. This makes a certain amount of sense as the Hatter's watch seems to be concerned with calendar time, and if we accept 10⁶ as both an ordinary decimal and as a number in a

modular system.

So, just for amusement, let us divide 10⁶ or 1,000,000 by 7. The answer is 142857 weeks + 1 day. And then, like Alice, we must ask: "What does this signify?"

Among mathematicians 142857 is a famous "mysterious number" that in his later years, Charles Dodgson used to impress school children. He would write the number down and ask them to multiply it by 2, 3, 4, 5 and 6. The results were surprising: each of these multiples of 142857 would yield a product consisting of a cyclic permutation of the original six digits.

 $142857 \times 2 = 285714$ $142857 \times 3 = 428571$ $142857 \times 4 = 571428$ $142857 \times 5 = 714285$ $142857 \times 6 = 857142$

However, upon its multiplication by seven, we have a quite different result: $142857 \times 7 = 9999999...$ This is because seven is a prime number whose reciprocal (1/7) has a periodic length of 6 as demonstrated in its cyclical decimal representations of the fraction.

$$\frac{1 = 142857}{7 = 999999} = 0.1428571428571428571428...$$

In fact, all fractions with a denominator 7 have a period length of 6:

$$1/7 = .142857 \ 2/7 = .285714 \ 3/7 = .428571$$

 $4/7 = .571428 \ 5/7 = .714285 \ 6/7 = .857142$

These kinds of cyclical numbers were known to Dodgson as a "circulating decimal." In his squib "The Offer to the Clarendon Trust" (1868), Dodgson suggests that since laboratories were being built for the other sciences, mathematics ought to have their own labs. And among them, he absurdly suggests: "A large room, which might be darkened, and fitted with a magic lantern, for the purpose

of exhibiting Circulating Decimals in the act of circulation."

So accepting 7 as the defining prime number whose length of decimal expansion is 6, let us now see what other mathematical tricks we may pull out of the Hatter's Hat if we observe the Hatter as he is called up as a witness in the court of the King and Queen of Hearts. Once accused by the Queen of 'murdering time,' the Hatter "kept shifting from one foot to the other" nervously dancing back and forth—in periodic motion—like a metronome.

The Hatter's complaint is that he is stuck in time—perpetual Tea Time (at 6 o'clock). This is because the Hatter does not have any unit he can measure time with until Alice introduces her prime number of 7. However, the Hatter is still stuck in time at the trial because his hat's value of 10⁶ (1 million) is not exactly congruent with the prime number 7. The Hatter needs to deduct 1 to arrive at 999999—and this appears to occur when "in his confusion he bit a large piece out of his tea cup."

What does this signify? If we read "In this Style 10/6" as "In this Mode 106," we arrive at a formula $10^6 \cong 1 \pmod{7}$ that can trigger exponential growth. This formula is a specific application of a theorem critical to number theory and modular mathematics. It is a famous theorem in the history of mathematics, known as Fermat's Theorem: $a^{p-1} \cong 1 \pmod{p} \cong 1 \pmod{p}$. To be specific, if we apply Fermat's Theorem (not to be confused with Fermat's Last Theorem) to a formula with 7 = prime, we would arrive at $10^{7-1} \cong 1 \pmod{7}$ or more simply stated, the Hatter's: $10^6 1 \pmod{7}$.

So, what happens next? "Just at this moment Alice felt a very curious sensation, which puzzled her a great deal until she made out what it was: she was beginning to grow larger again." The Hatter's action has triggered Alice's "ridiculous" exponential growth.

PIERRE DE FERMAT (1601-1665) was a French lawyer of Basque origin and a mathematician credited with the early development of modern calculus. He made major discoveries in number theory, probability theory and algebraic geometry.

Also, the theorem's importance in modular arithmetic is perhaps why Lewis Carroll saw fit to pay tribute to Fermat through a cryptic inscription on his Hatter's Hat. In fact, if we take a hint from another of his political-mathematical squibs, "The Dynamics of a Particle," the chapter title itself can be viewed as the typical Carrollian "tea = t = time" pun extended to include modular arithmetic: "A Mad Tea Party" = "A Modular Time Particle" = "a mod t particle" (mod = modular, t = time, particle = unit).

Alice soon discovers that the tea party is primarily concerned with the measuring, managing and ordering of time. The Mad Hatter personifies time in the folk-tale form of Old Father Time: the iconic old bearded man with a scythe, derived from the myth of the Greek Cronus, the scythe-bearing god of time. Cronus is also the source of our image of the Grim Reaper, who comes to us all in time.

The tea party is rife with riddles, the most famous of which is the Hatter's: "Why is a raven like a writing-desk?" It goes unanswered, and scores of readers over the years have attempted to solve it. Martin Gardner in his *Annotated Alice* quotes several, among them: "Poe wrote on both," "bills and tales are among their characteristics," "both slope with a flap," "both have inky quills," "one is good for writing books and the other better for biting rooks" and "one has flapping fits and the other fitting flaps."

In 1896—two years before his death—Carroll provided some sort of answer: "Because it can produce a few notes, tho they are *very* flat; and it is nevar put with the wrong end in front!" By the purposeful misspelling of *never* as *nevar—raven* spelled backwards—Carroll succeeds in making his nonsensical answer make some kind of sense, as well as having the added dimension of an allusion to Edgar Allan Poe. After all, if one puts the wrong end in front, the bird will be "nevar-more."



The Liddell sisters: Alice, Lorina and Edith.

The Hatter shook his head mournfully. "Not I!" he replied. "We quarreled last March—just before *he* went mad, you know—" (pointing with his tea spoon at the March Hare,) "—it was at the great concert given by the Queen of Hearts, and I had to sing

'Twinkle, twinkle, little bat! How I wonder what you're at!'

You know the song, perhaps?"
"I've heard something like it," said Alice.
"It goes on, you know," the Hatter continued, "in this way:—

'Up above the world you fly, Like a tea-tray in the sky. Twinkle, twinkle—' "

A few peripheral references and private jokes are woven into the tea party scene. The Mad Hatter's song beginning "Twinkle, twinkle, little bat!" is of course a parody of Jane Taylor's poem "The Star" (1805). The bat is commonly believed to be Carroll's mathematics tutor, friend and colleague Bartholomew "Bat" Price (1818–1898). Price published major works on differential and infinitesimal calculus, and his lectures—as Carroll acknowledged in his diaries—often flew above the heads of his

students.

The Dormouse's story was also told as an inside joke about the Liddell sisters. It begins, "Once upon a time there were three little sisters ... Elsie, Lacie, and Tillie; and they lived at the bottom of a well." Once again, Carroll uses the pun about the "three little [Liddell] sisters"; Elsie is Lorina Charlotte (initials L. C.), Lacie is Alice (anagram) and Tillie is Edith (actual pet name Matilda).



The Burne-Jones window, Christ Church Cathedral.

According to the Dormouse's absurd story, the little sisters lived at the bottom of a treacle well and lived on treacle (molasses). In fact, *treacle well* was a medieval term for a well or spring blessed with healing powers. The Dormouse is alluding to a locally famous well at Binsley, near Oxford. This well was sacred to St. Margaret and plays a crucial role in the legend of St. Frideswide, the patron saint of Oxford. Christ Church's cathedral was built on the site of her priory.

The Liddell sisters would have witnessed the installation and dedication of Edward Burne-Jones's St. Frideswide stained glass window in Christ Church Cathedral in 1859. And in later life, Alice carved a wooden panel, now in St. Frideswide's, Ostney, portraying a scene from the saint's life.

A second allusion relates to these three sisters and the well from which they drew "everything that begins with an M, such as mousetraps, and the moon, and memory ..." In the classical Greek underworld, we may also discover a well "that begins with an M": Mnemosyne, the Well of Memory. As we saw earlier, Mnemosyne was also the mother of the

Muses, and thus linked to the prologue poem's same three little (Liddell) sisters who are Carroll's muses.



This way to Wonderland: Door to the Deanery Garden.

After all the riddles and conundrums posed to her by a variety of Wonderland tutors since leaving the great hall, Alice, like an initiate of the Eleusinian Mysteries, has acquired many life lessons. She has learned how to keep her temper, mind her own business and "at any rate" keep a proper sense of size and proportion. And despite her initial impression that the Mad Tea-Party was "the stupidest tea-party I ever was at in all my life!" she finds she has actually also learned how to "manage better this time"—or manage time. After returning to the great hall, she finds she is easily able to follow a logical sequence of steps that will finally allow her to use the golden key to pass through the curtained door and enter the rose garden at the heart of Wonderland. There she discovers a strangely familiar royal garden.

Here the Dormouse shook itself, and began singing in its sleep "Twinkle, twinkle, twinkle—" and went on so long that they had to pinch it to make it stop.

"Well, I'd hardly finished the first verse," said the Hatter, "when the Queen jumped up and bawled out, 'He's murdering the time! Off with his head!'

"How dreadfully savage!" exclaimed Alice.

"And ever since that," the Hatter went on in a mournful tone, "he won't do a thing I ask! It's always six o'clock now."

A bright idea came into Alice's head. "Is that the reason so many tea-things are put out here?" she asked.

"Yes, that's it," said the Hatter with a sigh: "it's always tea-time, and we've no time to wash the things between whiles."



John Duns Scotus: Despite the cap, he was known as the Subtle Doctor.

A SYMPOSIUM OF DUNCES Although broadly satirizing the Cambridge Christian Socialists, much of the philosophizing at the tea party relates to a very different tradition. A champion of the discipline of logic, Carroll was immensely proud of Oxford's golden age of Scholastic philosophers—its famous thirteenth-century Schoolmen. And as the author of *Symbolic Logic*, a text that he laboured over for thirty years, Carroll saw himself as part of the intellectual tradition that over the centuries improved and advanced Aristotle's system of syllogistic logic.

"Dodgson had to a certain extent missed his age," wrote Thomas Banks Strong, a colleague of Dodgson's, and eventual bishop of Oxford. "He ought to have lived in the Middle Ages in the palmy days of Scholasticism. His peculiar gifts of mind would ... have enabled him to rout all other Schoolmen, and to produce subtleties and dialectical terms which would have beaten and confounded the whole of Europe."

Strong's opinion of Dodgson's talents is especially compelling if we view the Mad Tea-Party as a satire of a philosophers' symposium made up of Oxford's three greatest medieval thinkers: John Duns Scotus, William of Occam and Roger Bacon. The greatest of these three medieval Oxford Schoolmen, the Scots-born John Duns Scotus (1265–1308), is Lewis Carroll's philosophical Mad Hatter. *Wonderland*'s illustrator John Tenniel gave the Mad Hatter a nineteenth-century hat, but it soon becomes clear that what Carroll had in mind was the distinctive conical hat worn by the Franciscan Dunsmen—the Duns cap or dunce's cap.

During the Wonderland trial, the judge—the King of Hearts—rebukes the Hatter with the rhetorical question, "Do you take me for a dunce?" The Hatter twice pleads, "I am a poor man"—a further clue, for as a Franciscan friar Duns Scotus has taken an oath of poverty. Nor is this the only time this Duns-dunce appears in Carroll's writing. He pops up in *Through the Looking-Glass*, *Sylvie and Bruno*, *Phantasmagoria* and "Ode to Damon," in which Damon is a "dunce" and the "prince of all dummies."

A deep thinker, an original mind and a sharp critic, Duns Scotus was anything but a dim-witted dunce. He was known as the Subtle Doctor for his finely distinguished points of logic. However, in the fifteenth century a new wave of Renaissance Neoplatonism swept away Scholasticism as unfashionable and irrelevant. For humanists and reformers, "Dunsman" or "dunce" became a term of abuse—and the dunce cap became a humiliating symbol for those incapable of learning.

Duns Scotus as the Hatter is also appropriate on a deeper, psychological level. One celebrated Scholastic problem was "individuation"—how do we tell one thing apart from another? As Duns Scotus's answer was "form," it is understandable that Carroll might characterize him as a maker of hats—a profession entirely concerned with form.

"Suppose we change the subject," the March Hare interrupted, yawning. "I'm getting tired of this. I vote the young lady tells us a

[&]quot;Then you keep moving round, I suppose?" said Alice.

[&]quot;Exactly so," said the Hatter: "as the things get used up."

[&]quot;But what happens when you come to the beginning again?" Alice ventured to ask.

story."

"I'm afraid I don't know one," said Alice, rather alarmed at the proposal.

"Then the Dormouse shall!" they both cried. "Wake up, Dormouse!" And they pinched it on both sides at once.

The Dormouse slowly opened his eyes. "I wasn't asleep," he said in a hoarse, feeble voice, "I heard every word you fellows were saying."

The Hatter's identity also fits in with Plato's explanation of the nature of archetypes, in which he stated that "the maker of anything" must have in his mind an ideal model. The Hatter's hat is a model based on such an archetype. When the King tells him to remove his hat, the Hatter nervously replies, "It isn't mine.... I keep them to sell.... I've none of my own. I'm a hatter." His hat is what Plato calls "a likeness of an eternal model," or an *eikon*—from which we derive our word *icon*.

The March Hare is William of Occam (c. 1288–c. 1348), an English Franciscan friar who became known as Doctor Invincibilis: the unconquerable debater and peerless teacher. He is most famous for the principle of Occam's razor, or the law of economy, which states that among competing hypotheses, the hypothesis with the fewest assumptions should be selected. This razor was the Occam/Hare's most effective means of dealing with Scotus/Hatter's notoriously complex, hair/hare-splitting logic. It also accounts for the Hatter's rude interjection to Alice: "Your hair wants cutting." That is, the Occam/Hare wants to cut through Alice's chatter and have her get to the point.

Through the introduction of diabolical alliterative puns, the March Hare reappears numerous times in Carroll's work. In *Through the Looking-Glass*, both the Hare and the Hatter appear as the messengers Haigha and Hatta. In *Sylvie and Bruno*, a lunatic German professor known as Mein Herr complains "Mine head's for hair." Elsewhere, we may discover a "March of the Mind," wherein "Mine Host" is to "March Here" to the tune of a "March Air."



Roger Bacon: Polymath and prodigy.



William of Occam: He was unconquerable.

The Dormouse is Roger Bacon (c. 1215–c. 1292), the eldest of the Oxford Schoolmen. Known as the Angelic Doctor, Bacon was an English Franciscan Scholastic philosopher who was among the first to lecture on the newly discovered works of Aristotle. Much of the scholarship of the other two Schoolmen rested on Bacon's pioneering work (particularly in the field of logic), which may explain why the Hare and the Hatter were using the Dormouse "as a cushion."

Bacon was a polymath and a prodigy who matriculated at Oxford at the age of thirteen. Later, as a master at Oxford, he lectured on dialectics and syllogistic logic. Like the Dormouse in the teapot, Bacon found himself in hot water—and both were called up before the courts. In Bacon's case, this resulted in a ban on publishing, lecturing and teaching.

Curiously enough, Friar Bacon's study was a tower that once stood at Folly Bridge—the departure point for Alice Liddell on that fateful boat trip that sparked the telling of the Wonderland tale. "Tell us a story!" said the March Hare.

"Yes, please do!" pleaded Alice.

"And be quick about it," added the Hatter, "or you'll be asleep again before it's done."

"Once upon a time there were three little sisters," the Dormouse began in a great hurry; "and their names were Elsie, Lacie, and Tillie; and they lived at the bottom of a well—"

"What did they live on?" said Alice, who always took a great interest in questions of eating and drinking.

THE MACHINERY OF LOGIC Throughout the tea party, Lewis Carroll involves his characters in the chief Scholastic philosophic debates of the Middle Ages. These related to questions about the nature of reality. This became known as the "problem of universals" as examined through dialectics and syllogistic logic. His characters satirize the three major approaches to this problem: nominalism, conceptualism and realism.

Nominalists held that universals—the quality of an entity (i.e., the redness of an apple or the beauty of a child)—are merely names; that is, words rather than existing realities. Conceptualists held that they are mental concepts; that is, the names are names of concepts, which do exist, although only in the mind. And realists believed that universals had a "mind-independent" existence; that is, independent of what we think, they exist and are there to be discovered.

These concepts of reality change frequently in the surreal territory of Wonderland. Carroll is constantly shifting the ground beneath our feet—first taking one view, then shifting to another. Abstract concepts and names become real things, and real things become objects. Wonderland, we discover, is just the product of the manipulation of language.

The problem of universals is first apparent in the tea party debate set off by Alice's indecisiveness over whether she says what she means or means what she says. When the March Hare tells Alice, "You should say what you mean," he is taking the position of the conceptualist, for whom meaning something is one thing and saying it is another. Meanwhile, the Hatter insists that meaning what you say is distinct from this, and implies that it is words that mean; he is taking the position of the nominalist.

Reading *Wonderland* on this level, we must be aware of key words in the formal language of the logician. In fact, Charles Dodgson has actually supplied us with his "dictionary" of key words and definitions in his text *Symbolic Logic*. Words such as *terms*, *things*, *sentence*, *name*, *sound*, *trial*, *expression*, *heap*, *jump*, *some*, *all*, *not*, *sort*—all these have specialized meanings to logicians.

"They lived on treacle," said the Dormouse, after thinking a minute or two.

"They couldn't have done that, you know," Alice gently remarked; "they'd have been ill."

"So they were," said the Dormouse; "very ill."

Alice tried to fancy to herself what such an extraordinary ways of living would be like, but it puzzled her too much, so she went on: "But why did they live at the bottom of a well?"

"Take some more tea," the March Hare said to Alice, very earnestly.

"I've had nothing yet," Alice replied in an offended tone, "so I can't take more."

"You mean you can't take *less*," said the Hatter: "it's very easy to take *more* than nothing."

"Nobody asked your opinion," said Alice.

"Who's making personal remarks now?" the Hatter asked triumphantly.

Alice did not quite know what to say to this: so she helped herself to some tea and bread-and-butter, and then turned to the Dormouse, and repeated her question. "Why did they live at the bottom of a well?"

The Dormouse again took a minute or two to think about it, and

Carroll frequently employs logical-linguistic tricks to comic effect. The most obvious case is revealed when the Hatter berates Alice: "If you knew Time as well as I do, you wouldn't talk about wasting *it*. It's *him*." The Hatter treats the abstract concept of time as if it were a person called Time. The humour comes from the constant shifting of the portrayal: wasting time, beating time, murdering time, musical time, managing time and quarrelling with Old Father Time.

As a logician, Dodgson/Carroll obviously delights in baffling and amusing Alice and his readers. However, as Alice walks away from the tea party, she seems somewhat wiser for the experience. She acknowledges that "I'll manage better this time." And finds that she is now quite capable of navigating through the logical maze of Wonderland.

Alice is beginning to learn how to "master the machinery" of logic as Dodgson describes this process in *Symbolic Logic*: "It will give you clearness of thought—the ability to *see your way* through a puzzle—the habit of arranging your ideas in an orderly and get-at-able form—and, more valuable than all, the power to detect *fallacies*, and to tear to pieces the flimsy illogical arguments, which you will so continually encounter in books, in newspapers, in speeches, and even in sermons, and which so easily delude those who have never taken the trouble to master this fascinating Art."



"There's no such thing!" Alice was beginning very angrily, but the Hatter and the March Hare went "Sh! Sh!" and the Dormouse sulkily remarked, "If you can't be civil, you'd better finish the story for yourself."

"No, please go on!" Alice said very humbly; "I won't interrupt again. I dare say there may be *one*."

"One, indeed!" said the Dormouse indignantly. However, he consented to go on. "And so these three little sisters—they were learning to draw, you know—"

"What did they draw?" said Alice, quite forgetting her promise.

"Treacle," said the Dormouse, without considering at all this time.

"I want a clean cup," interrupted the Hatter: "let's all move one place on."

He moved on as he spoke, and the Dormouse followed him: the March Hare moved into the Dormouse's place, and Alice rather unwillingly took the place of the March Hare. The Hatter was the only one who got any advantage from the change; and Alice was a good deal worse off than before, as the March Hare had just upset the milk-jug into his plate.

Alice did not wish to offend the Dormouse again, so she began very cautiously: "But I don't understand. Where did they draw the treacle from?"

"You can draw water out of a water-well," said the Hatter; "so I should think you could draw treacle out of a treacle-well—eh, stupid?"

A MOVABLE FEAST In *The White Knight: A Study of Lewis Carroll*, A. L. Taylor explains that on May 4, 1862 (the real-life Alice's 10th birthday), there was exactly two days' difference between the lunar and solar calendar months. Taylor speculates that the lunatic Mad Hatter's calendar-watch runs on lunar time, and this explains why the watch is "two days wrong."

Martin Gardner, in his *Annotated Alice*, takes note of this speculation, but concludes: "The conjecture is also supported by the close connection of 'lunar' with 'lunacy,' but it is hard to believe that Carroll had all this in mind." However, it is difficult not to side with Taylor in this, for it is almost impossible to believe that Carroll—whose uncle was the Commissioner in Lunacy—hadn't intended this connection, and a good deal more.

Carroll was obsessed with timetables and systems for calculating hours, days and months of the year on a variety of solar and lunar calendars. In 1856, he entered into a running debate in *The Times* concerning the rotation of the moon. In 1857, he began research into the life of St. Cyril, who had produced a Paschal Cycle calendar of ninety-five years, from AD 437 through 531. This research, according to the editor of his diaries, Edward Wakeling, "resulted in his later interest in calendars and calculating the Christian feast days such as Easter."

Given Carroll's obsessive personality, it seems impossible that the point of this entire episode involving the watch and the Mad Hatter's tea party is not connected to Carroll's calculations related to the co-ordination of solar and lunar calendars.

There are three calendar dates that matter in *Wonderland*. July 4 is the date of the boat trip that inspired the fairy tale. May 4 is Alice Liddell's birthday. And March 14 is the date the March Hare went mad. Playing with the traditional explanation of the March Hare's "madness" during the spring mating season, Carroll presents us with

a curious passage in the Wonderland trial wherein the Mad Hatter attempts to give an exact date of March 14, although the Hare and the Dormouse argue it is the fifteenth or sixteenth.

These dates are significant to Greco-Roman history. The timing roughly coincides with the variable dates of the ides of March and, more significantly, the bacchanalian festival's mad wine party—a festival so mad and wild that it was deemed such a threat to the status quo that the Roman senate in 186 BC attempted to suppress it with brutal military force. March 14 was also the date in the ancient Roman calendar for the beginning of the festival of Hilaria, a celebration of the legend of Attis—the lover of the Earth goddess Cybele—who, like the March Hare, was driven mad.

"But they were *in* the well," Alice said to the Dormouse, not choosing to notice this last remark.

"Of course they were", said the Dormouse: "—well in."

This answer so confused poor Alice, that she let the Dormouse go on for some time without interrupting it.

"They were learning to draw," the Dormouse went on, yawning and rubbing its eyes, for it was getting very sleepy; "and they drew all manner of things—everything that begins with an M—"

"Why with an M?" said Alice.

"Why not?" said the March Hare.

Alice was silent.

The Dormouse had closed its eyes by this time, and was going off into a doze; but, on being pinched by the Hatter, it woke up again with a little shriek, and went on: "—that begins with an M, such as mousetraps, and the moon, and memory, and muchness—you know you say things are 'much of a muchness'—did you ever see such a thing as a drawing of a muchness?"

"Really, now you ask me," said Alice, very much confused, "I don't think—"

"Then you shouldn't talk," said the Hatter.

Since medieval Christian times, as well, there has been a mid-March festival known as Mothering Sunday, which falls on the fourth Sunday of Lent. This was a kind of tea party celebration as it was marked with a respite from Lenten fasting, and cakes and refreshments were served. This in turn was followed by Easter Sunday, another celebration that can be seen as a kind of tea party.

All these mid-March festivities relate to the vernal equinox and suitably bring us back to the mythological identity of Alice as Persephone (or Proserpine or Eostre), the goddess of spring. The problem is, of course, the inaccuracies of solar calendars result in a slippage of timing of these festivals in relation to the spring equinox and consequently result in a major problem for Christian calendars: determining the date of the Easter holidays, the most important date in the Christian ecclesiastic calendar and, in medieval times, the beginning of the new year.

Here we arrive at the true nature of the Mad Tea-Party. Given that we recognize that tea = t = time, what kind of time are we dealing with? Why is it necessary to have Alice point out that the tea partiers "keep moving round" and that the party is perpetual and cyclical?

The tea party is meant as a charade. It is the answer to the riddle "What do you call a perpetually moving tea party?" And the answer, as the Reverend Charles Dodgson would recognize, would be a kind of ecclesiastical joke: "A movable feast."

A movable feast is a Christian holy day (that is, a feast day or fast day) whose date is fixed in the essentially lunar ecclesiastical calendar but each year must be moved to fit into the solar calendar, which is slightly longer. Consequently, if the Mad Tea-Party is a movable feast, then the tea table must logically be a perpetual rotating calendar-table of movable feast days. This is comparable to the ecclesiastic tabular lunar calendars that are used to calculate the dates for Easter Sunday and other movable feast days.

The problem of finding dates for movable feast days would obsess Dodgson for his entire life—and would frequently result in everimproved systems of calculation. In the last year of his life, Dodgson wrote to a colleague about his pamphlet "Rule for Finding Easter-Day for Any Date till AD 2499."

Writing in a Carrollian newsletter in 2012, the mathematician Francine Abeles observed that in the same letter: "Dodgson mentions the method he created ten years earlier for finding the day of the week for any given date. Such a method, together with a rule for finding Easter Sunday, is the main ingredient of a mechanical perpetual calendar which first appeared early in the twentieth century."



This piece of rudeness was more than Alice could bear: she got up in great disgust, and walked off; the Dormouse fell asleep instantly, and neither of the others took the least notice of her going, though she looked back once or twice, half hoping that they would call after her: the last time she saw them, they were trying to put the Dormouse into the teapot.

"At any rate I'll never go *there* again!" said Alice as she picked her way through the wood. "It's the stupidest tea-party I ever was at in all my life!"

Just as she said this, she noticed that one of the trees had a door leading right into it. "That's very curious!" she thought. "But everything's curious today. I think I may as well go in at once." And in she went.

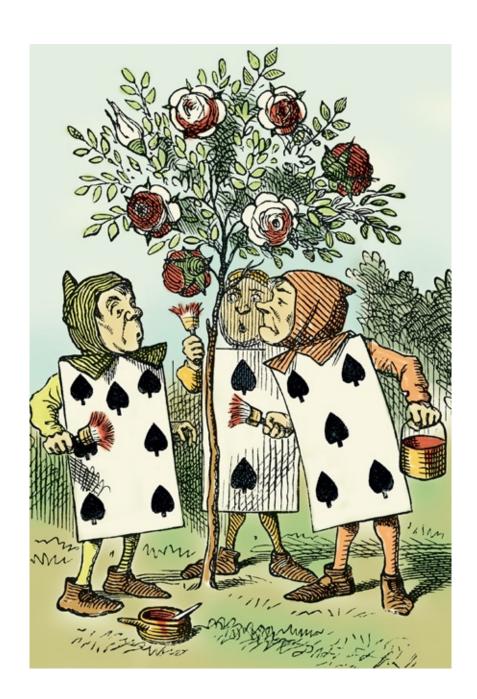
Once more she found herself in the long hall, and close to the little glass table. "Now, I'll manage better this time," she said to herself, and began by taking the little golden key, and unlocking the

door that led into the garden. Then she went to work nibbling at the mushroom (she had kept a piece of it in her pocket) till she was about a foot high: then she walked down the little passage: and *then*—she found herself at last in the beautiful garden, among the bright flower-beds and the cool fountains.

Chapter 8: The Queen's Croquet-Ground

"They're dreadfully fond of beheading people here."





GAMES IN THE GARDEN When Alice finally finds her way into Wonderland's "beautiful garden" and croquet ground, she discovers a white rose tree being painted red by gardeners in the form of animated and quarrelsome playing cards. Yet Alice does find something oddly familiar about this garden—and this surreal scene—undoubtedly because this chapter is largely a burlesque of the real Alice's own family's garden and croquet parties at the Deanery at Christ Church, Oxford.

The Deanery garden was the site of many of the elaborate garden parties Alice Liddell's parents, the Dean and Mrs. Liddell, held for all levels of British high society: academic, political, ecclesiastic, military and royal.

It was also while gazing through a window in the college library that Lewis Carroll first caught sight of Alice and her sisters, on the Deanery's croquet lawn. Later, he arranged to photograph Alice and her two sisters in the garden, wearing their best summer dresses and holding croquet mallets.



Who's for croquet?: Alice and her sisters.

THE QUEEN'S CROQUET-GROUND.

A large rose-tree stood near the entrance of the garden: the roses growing on it were white, but there were three gardeners at it, busily painting them red. Alice thought this a very curious thing, and she went nearer to watch them, and just as she came up to them she heard one of them say, "Look out now, Five! Don't go splashing paint over me like that!"

"I couldn't help it," said Five, in a sulky tone. "Seven jogged my elbow."

On which Seven looked up and said, "That's right, Five! Always lay the blame on others!"

"You'd better not talk!" said Five. "I heard the Queen say only yesterday you deserved to be beheaded!"

"What for?" said the one who had spoken first.

"That's none of *your* business, Two!" said Seven.

"Yes, it is his business!" said Five, "and I'll tell him—it was for bringing the cook tulip-roots instead of onions."

On the mythological level, Wonderland's "beautiful garden" is the Garden of Elysium, the most desirable realm in the ancient Greek afterlife. In *Metamorphoses*, *or the Golden Ass* (C. AD 155), Lucius Apuleius tells us how, as an initiate into the Eleusinian Mysteries, he "set one foot on Proserpine's threshold...[and] entered the presence of the gods of the underworld."

Ruled by an underworld King and Queen, here were found the souls of heroes and heroines who, according to Homer and Pindar, could be observed engaged in games in the "blissful meadows" of asphodel lilies. Pindar gives us a fuller description of this place: "In Elysium where fields of the pale liliaceous asphodel, and poplars grew, there stood the gates that led to the house of Hades."

In Virgil's *Aeneid* we are told that Elysium enjoys perpetual springtime and there are gardens and shady groves. By the Renaissance, Elysium had become a synonym for an eternal pagan paradise. The Champs-Élysées, meaning "Elysian Fields," became the most celebrated avenue in Paris, and the Élysée Palace became the residence of the president of

France.



The Rose Garden of Philosophers: Don't forget your key.

Seven flung down his brush, and had just begun "Well, of all the unjust things—" when his eye chanced to fall upon Alice, as she stood watching them, and he checked himself suddenly: the others looked round also, and all of them bowed low.

"Would you tell me," said Alice, a little timidly, "why you are painting those roses?"

ROSICRUCIAN ROSE GARDEN It is significant that Alice first observes a garden with a rose tree with white roses being painted red. Wonderland's royal rose garden is also the garden of the Brotherhood of the Rosy Cross. One obvious parallel is that both Alice and the initiate must use a golden key to gain entry to the locked door into a rose garden.

Remarkably, all the tea party theosophists wrote extensively about this secret garden. The Rosicrucian Mad Hatter, Robert Fludd, published "A Philosophicall Key," which granted the initiate entry into that garden. The Rosicrucian March Hare, Michael Maier, also wrote about this secret rose garden and the golden key to its gate in his magnificently illustrated *Atalanta fugiens* (1617): "He who tries to enter the Rose-garden of Philosophers without the key is like a man wanting to walk without feet."

Maier also speaks of the revelation within the garden of the fountain flowing with the Rosicrucian "Elixir of the Red Rose and the White Rose." This epiphany is comically transformed in

Wonderland's rose garden into a scene wherein quarrelling gardeners desperately employ a red elixir (of sorts) to paint the white roses and transform them into red roses.

Also as noted here, an elaborate engraving in the Rosicrucian *Cabala, Mirror of Art and Nature: in Alchemy* (1615) shows a rabbit being pursued into an underground world comparable to Wonderland. In the same document, there is a more detailed illustration of this philosopher's rose garden on the pinnacle of the Mountain of Alchemy. This is the ultimate goal of the initiate: a rose garden with a hedge around the fountain of Mercury. The Wonderland garden with its white roses painted red, its "bright flower beds and cool fountains" and its King and Queen of Hearts is comparable to the Cabala's rose garden with its flower beds and fountains and its Sun King whose emblem is the red rose and Moon Queen whose emblem is the white rose. And both are comparable to the lawns and fountain of Mercury before the entrance to Christ Church's Deanery.



Ultimate goal: On the summit of the Mountain of Alchemy.

In the Wonderland garden, the denizens are—like those of the Garden of Elysium—also involved in the playing of games, in this case a peculiar card game and a very odd form of croquet. Wonderland's Elysium is the Queen's Croquet-Ground, where Alice watches the arrival of a royal procession of soldiers, courtiers, royal children, royal guests and the King and Queen of Wonderland themselves.

There were also processions of this sort in the Eleusinian Mysteries, just before the revelations. As Lucius Apuleius describes them, "Presently the vanguard of the grand procession came into view" with all manner

of costumes and emblems of deities.

As the Wonderland procession passes by, Alice wonders "whether she ought not to lie down on her face like the three gardeners." The real Alice would recognize the dilemma of a child's attempting to determine appropriate rules of etiquette for such a procession. It was important for her to learn how to determine the rank of those arriving in the Deanery garden so she could address them in the appropriate manner.

Five and Seven said nothing, but looked at Two. Two began in a low voice, "Why the fact is, you see, Miss, this here ought to have been a *red* rose-tree, and we put a white one in by mistake; and, if the Queen was to find it out, we should all have our heads cut off, you know. So you see, Miss, we're doing our best, afore she comes, to—" At this moment Five, who had been anxiously looking across the garden, called out "The Queen! The Queen!" and the three gardeners instantly threw themselves flat upon their faces. There was a sound of many footsteps, and Alice looked round, eager to see the Queen.

PYTHAGOREAN NUMBERS When Alice enters the garden, she discovers the numbers 7, 5 and 2 in the form of playing cards who are gardeners. Not illogically, the gardeners are spades, but what is the significance of their numbers?

Lewis Carroll studied the Pythagorean theory of numbers through the translations and theosophical commentaries in Thomas Taylor's *Theoretic Arithmetic* (1816). Pythagoreans believed that the first things were numbers, for nothing can exist or be discerned without number. Taylor succinctly summed up the Pythagorean theory by quoting Theon of Smyrna (c. AD 100), the disciple of Pythagoras and Plato: "Numbers are the sources of form and energy in the world. They are dynamic and active even among themselves ... almost human ... in their capacity for mutual influence."

It should not be surprising, then, that the first things Alice encounters in the Wonderland garden are numbers—or that they are behaving like quarrelling humans, "dynamic and active even among themselves." These card-gardeners confirm Theon's comment that "numbers have independent life and qualities that make them akin to living creatures with personalities."

In Wonderland, each of these numbers has a distinct personality: 7 is self-righteous and argumentative, 5 is sulky and accusatory, and 2 is quarrelsome and divisive. Here the playing cards behave like humans, while living creatures (flamingos and hedgehogs) behave like inanimate objects (croquet mallets and balls).

In the Wonderland garden, Carroll's choice of cards with the numbers 7, 5 and 2 has always been something of a mystery. The same has been true of the strange wording of the dispute 5 has with 7 over the trouble with "bringing the cook tulip-roots."

To resolve this mystery, we may, in a typical Lewis Carroll word twist, read "tulip-roots" as "the root of 2," or $\sqrt{2}$. And indeed, the numbers 7, 5 and 2 could give us an answer to the tulip-root riddle because the ancient Greeks famously used the ratio of 7 : 5 as the simplest and most convenient approximation of the irrational $\sqrt{2}$. And so, with the numbers 7, 5, 2 we can create the equation 7 : 5 = $\sqrt{2}$.

Furthermore, the reason for the dispute between these numbers is provided in the wording of 7's indignant reaction to 5's revelation about tulip-roots: "Well, of all the unjust things." For Pythagoreans, √2 was the archetypal unjust thing, for two reasons. First, it is an irrational number that cannot be "justified"—that is, it cannot be expressed as a whole number or as a fraction. And second, its discovery allegedly threatened to wreck the entire Pythagorean philosophy of whole numbers, to the point that, according to legend, its discoverer was drowned in the hope of concealing this flaw in their system.

However, once the secret was out, the ancient Greeks became especially fascinated with $\sqrt{2}$, just as they were with those other famous irrational keys to knowledge, Φ and π . All three produce infinite Euclidean algorithms, and were the focus of much study and wonder among the ancients—as well as our mathematician, Charles Dodgson.



Pythagoras: Numbers came before anything else.

First came ten soldiers carrying clubs; these were all shaped like the three gardeners, oblong and flat, with their hands and feet at the corners: next the ten courtiers; these were ornamented all over with diamonds, and walked two and two, as the soldiers did. After these came the royal children; there were ten of them, and the little dears came jumping merrily along hand in hand, in couples: they were all ornamented with hearts. Next came the guests, mostly Kings and Queens, and among them Alice recognised the White Rabbit: it was talking in a hurried nervous manner, smiling at everything that was said, and went by without noticing her. Then followed the Knave of Hearts, carrying the King's crown on a crimson velvet cushion; and, last of all this grand procession, came THE KING AND QUEEN OF HEARTS.

PLATO'S REPUBLIC IN WONDERLAND Lewis Carroll's *Wonderland* borrows extensively from the themes and ideas of Plato's *Republic*. Initially, Alice's underground hall in many ways is comparable to Plato's

famous allegory of the cave. In Francis Cornford's translation of *The Republic*, Plato describes his allegorical cave and its inhabitants: "Imagine the condition of men living in a sort of cavernous chamber underground, with an entrance open to the light and a long passage all down to the cave. Here they have been since childhood."

This is the condition of most people, Plato argues: living in darkness and shadows cast by firelight in an underground chamber. Only those who are willing to question their state of existence can make their way out of this subterranean world of illusions. Only then will they discover the tunnel into the light of the garden of true knowledge.

Alice's underground hall lit with lamps is like Plato's fire-lit cave—a subterranean world of illusions. And like Plato's prisoner, Alice struggles to find her way out of the underground chamber through a tunnel into a bright garden. "How she longed to get out of that dark hall, and wander about among those beds of bright flowers and those cool fountains."

In Plato's allegory, this garden is the ideal philosopher's garden of archetypes, or (as Plato stated) Ideas or Forms. In the Wonderland Queen's garden, Lewis Carroll parodies this garden of archetypes. It is an ideal abstract realm of number and form wherein numbered, oblong playing cards are animated and speak and behave like humans. For, as the logician and Carrollian scholar Duncan Black once wrote, Lewis Carroll's "real life was lived in a world of inner meanings. Philosophic and logical principles were just as real for him as human beings and occupied his mind just as much."

Consequently, in Wonderland's garden, the playing cards Alice first encounters are spades who—logically enough—work as gardeners. It follows that the numbered club cards are soldiers, the numbered diamonds are wealthy courtiers and the numbered hearts are the royal children.

The rank and order of these cards in the procession watched by Alice are similar to the rank and order of the hierarchy in Plato's republic. The gardener spades are matched with Plato's lowly agricultural workers; the Wonderland soldier clubs are comparable to his military auxiliaries; the courtier diamonds are akin to his wealthy merchant class; the Wonderland face cards of each suit resemble the republic's oligarchs in each class; and finally, in Carroll's trump suit of hearts, we have the royal family ruled by the King of Hearts who is the republic's philosopher-king.

Wonderland's parodic King of Hearts is somewhat dim-witted and vague, but relatively speaking, he does appear to possess some of the virtues of the temperate and self-restraining philosopher-king. Certainly, his habit of constantly pardoning all those condemned by his tyrannical Queen suggests something of a forgiving and compassionate nature. It is worth noting the King of Hearts' glib instruction to the White Rabbit to "Begin at the beginning." Although sounding absurd in the mouth of the rather foolish King of Hearts, it was the way Plato's philosopher-king ideally approached any dilemma. In fact, Aristophanes picked exactly the same phrase to mock Plato's school of philosophers in his comedy *The Clouds*.



Plato's cave: Only those who question can find the exit.

Alice was rather doubtful whether she ought not to lie down on her face like the three gardeners, but she could not remember ever having heard of such a rule at processions; "and besides, what would be the use of a procession," thought she, "if people had all to lie down upon their faces, so that they couldn't see it?" So she stood still where she was, and waited.

When the procession came opposite to Alice, they all stopped and looked at her, and the Queen said severely "Who is this?" She said it to the Knave of Hearts, who only bowed and smiled in reply.

"Idiot!" said the Queen, tossing her head impatiently; and, turning to Alice, she went on, "What's your name, child?"

"My name is Alice, so please your Majesty," said Alice very politely; but she added, to herself, "Why, they're only a pack of cards, after all. I needn't be afraid of them!"

"And who are *these*?" said the Queen, pointing to the three gardeners who were lying round the rose-tree; for, you see, as they were lying on their faces, and the pattern on their backs was the same as the rest of the pack, she could not tell whether they were gardeners, or soldiers, or courtiers, or three of her own children.

"How should I know?" said Alice, surprised at her own courage. "It's no business of *mine*."

The Queen turned crimson with fury, and, after glaring at her for a moment like a wild beast, screamed "Off with her head! Off—"



Royal visit: Prince and Princess of Wales at Christ Church.

This was particularly true of royal visits. The royal garden scene in

Wonderland would certainly remind Alice Liddell of Queen Victoria's visit to Christ Church in 1860, and the reception held on the evening of her stay at the Deanery. She would also vividly remember the grand processions of soldiers and high-ranking officials during the 1863 royal visit of the newlywed Prince and Princess of Wales. On this occasion, a photograph was taken in Tom Quad in which Alice and her family can be seen seated next to the royal couple on a dais under a pavilion tent before a large gathering of soldiers and guests and the *Fountain of Mercury*.



Henry Liddell: King of Hearts.

Alice Liddell's parents were the closest thing to royalty that academia had to offer. Consequently, in Wonderland, the King and Queen of Hearts are Alice's parents: Henry George Liddell (1811–1898) and Lorina Hannah Liddell (1826–1910). Henry Liddell—dean of Christ Church and chief administrator of Oxford University—was an authentic aristocrat, with an earl on one side of the family and a baron on the other. He became the confidant of three prime ministers, Palmerston, Gladstone and Disraeli, and was on intimate terms with the Queen and her family.

"Nonsense!" said Alice, very loudly and decidedly, and the Queen was silent.

The King laid his hand upon her arm, and timidly said "Consider, my dear: she is only a child!"

The Queen turned angrily away from him, and said to the Knave "Turn them over!"

The Knave did so, very carefully, with one foot.

"Get up!" said the Queen, in a shrill, loud voice, and the three gardeners instantly jumped up, and began bowing to the King, the Queen, the royal children, and everybody else.

"Leave off that!" screamed the Queen. "You make me giddy." And then, turning to the rose-tree, she went on, "What have you been doing here?"

"May it please your Majesty," said Two, in a very humble tone, going down on one knee as he spoke, "we were trying—"

"I see!" said the Queen, who had meanwhile been examining the roses. "Off with their heads!" and the procession moved on, three of the soldiers remaining behind to execute the unfortunate gardeners, who ran to Alice for protection.

Liddell was also highly respected as an academic. He was the foremost Greek scholar of his day, and co-author of the still-authoritative Liddell and Scott *Greek-English Lexicon*. His administration was noted for its liberal reforms and the academic modernization of Oxford. Furthermore, Liddell architecturally transformed Christ Church by carrying out the most ambitious building program in its history. Although sometimes intimidating and aristocratic in his bearing, he was also noted for his kindly nature.

Like the King of Hearts, Liddell was generally seen as well-meaning but—like many academics—somewhat vague and careless as an administrator. In this, the dean was certainly comparable to the vague and indecisive King of Hearts, who demonstrates a similar cavalier disregard for legal procedures as he flip-flops on court rulings: "important—unimportant—unimportant—important" as if he were trying which word sounded best."

On the mythological level, the King of Hearts and Dean Liddell both assume the mantel of Hades, the King of the Underworld. As his subterranean world was also the source of minerals and gemstones, Hades was sometimes known as "the rich one" or Plouton, derived from the Greek word for "wealth," from which the Romans came to know him

as Pluto. He also was given the epithet Eubuleus, meaning "good counsel" or "well-intentioned." For, despite our modern view of this underworld god, in Greek mythology, Hades was commonly portrayed as passive rather than evil. Like the rather benign King of Hearts, his role was to maintain balance between worlds.

Hades's Queen is most commonly portrayed as the goddess Persephone. But she assumed this role only after her marriage to Hades—and then only for a third of each year. Clearly, the character of the Queen of Hearts is conveyed on the mythological level by another, more archaic goddess who preceded Persephone as Queen of the Underworld.

Twenty years after writing his fairy tale, Lewis Carroll himself provided his readers with a specific clue to the mythological origin of the Queen of Hearts. In his essay "'Alice' on the Stage," Carroll tells us: "I pictured to myself the Queen of Hearts as a sort of embodiment of ungovernable passion—a blind and aimless Fury."

The Furies, or in Greek the Erinyes, meaning "the avengers," were the underworld servants of Hades. These demonic women would inflict condemned murderers and perjurers with tormenting madness. After a considerable mythological investigation, the Carroll biographer Donald Thomas names the prototype of Wonderland's Queen of Hearts as Tisiphone, the Queen of Furies.

"You shan't be beheaded!" said Alice, and she put them into a large flower-pot that stood near. The three soldiers wandered about for a minute or two, looking for them, and then quietly marched off after the others.

"Are their heads off?" shouted the Queen.

"Their heads are gone, if it please your Majesty!" the soldiers shouted in reply.

"That's right!" shouted the Queen. "Can you play croquet?"

The soldiers were silent, and looked at Alice, as the question was evidently meant for her.

"Yes!" shouted Alice.

"Come on, then!" roared the Queen, and Alice joined the procession, wondering very much what would happen next.

"It's—it's a very fine day!" said a timid voice at her side. She was

walking by the White Rabbit, who was peeping anxiously into her face.

"Very," said Alice: "—where's the Duchess?"



Ungovernable passion: Orestes Pursued by the Furies, by Adolphe William Bouguereau, 1862.

Tisiphone the Fury would certainly be an excellent model temperamentally for the heartless and vengeful Queen of Hearts. The Furies, as the underworld court's avenging spirits, had a duty to enforce the penalty for the crime of perjury, which may go some way toward explaining the Queen's irrational suspicion of any witness or defendant in her court. Also, "Tisiphone"—meaning "voice of revenge"—fits the shrieking Queen of Hearts with her cry of "Off with his head!"

Or, as Donald Thomas concludes in *Lewis Carroll: A Portrait with Background*: "As in Wonderland so in the underworld, the Queen of Furies presides over the punishments, in ways more colourful than a mere command of 'Off with his head!' "However, this being a child's fairy tale, Carroll has reduced the terror of the Queen of Furies to that of a cardboard Queen of Hearts, who, we are assured, actually "never executes nobody, you know."

"Hush!" said the Rabbit in a low, hurried tone. He looked anxiously over his shoulder as he spoke, and then raised himself upon tiptoe, put his mouth close to her ear, and whispered "She's under sentence of execution."

"What for?" said Alice.

"Did you say 'What a pity!'?" the Rabbit asked.

"No, I didn't," said Alice: "I don't think it's at all a pity. I said 'What for?' "

"She boxed the Queen's ears—" the Rabbit began. Alice gave a little scream of laughter. "Oh, hush!" the Rabbit whispered in a frightened tone. "The Queen will hear you! You see, she came rather late, and the Queen said—"

"Get to your places!" shouted the Queen in a voice of thunder, and people began running about in all directions, tumbling up against each other; however, they got settled down in a minute or two, and the game began. Alice thought she had never seen such a curious croquet-ground in her life; it was all ridges and furrows; the balls were live hedgehogs, the mallets live flamingoes, and the soldiers had to double themselves up and to stand on their hands and feet, to make the arches.



Lorina Liddell: Queen of Hearts.

Alice's mother, Lorina Hannah Liddell—the real-life Queen of Hearts—was beautiful when young. In later life, this mother of ten became stouter and temperamentally rather overbearing. As the Deanery became the hub of Oxford society, it was only through the dean's wife that access might be granted to visiting prime ministers, archbishops, aristocrats and royalty. Consequently, like Wonderland's royal family

under the authority of the Queen, the Liddells were very much seen as Oxford's royal family firmly under the authority of Mrs. Liddell.

Certainly, Lewis Carroll was not the first to observe how Mrs. Liddell often held court at the Deanery. There was a jingle—not of Carroll's composition—that made its rounds at Oxford:

I am the Dean and this is Mrs. Liddell She plays the first, and I the second fiddle. She is the Broad; I am the High: And we are the University.

The chief difficulty Alice found at first was in managing her flamingo: she succeeded in getting its body tucked away, comfortably enough, under her arm, with its legs hanging down, but generally, just as she had got its neck nicely straightened out, and was going to give the hedgehog a blow with its head, it would twist itself round and look up in her face, with such a puzzled expression that she could not help bursting out laughing; and, when she had got its head down, and was going to begin again, it was very provoking to find that the hedgehog had unrolled itself, and was in the act of crawling away: besides all this, there was generally a ridge or furrow in the way wherever she wanted to send the hedgehog to, and, as the doubled-up soldiers were always getting up and walking off to other parts of the ground, Alice soon came to the conclusion that it was a very difficult game indeed.

The players all played at once without waiting for turns, quarrelling all the while, and fighting for the hedgehogs; and in a very short time the Queen was in a furious passion, and went stamping about, and shouting "Off with his head!" or "Off with her head!" about once in a minute.

To some, the Deanery must have seemed haunted by its former royal inhabitants: the ill-fated King Charles I and his Queen, Henrietta Maria. The royal couple had made Christ Church and the Deanery their palace during the English Civil War. It appears that by reputation Queen Henrietta Maria, Lorina Hannah Liddell and the Queen of Hearts were

temperamentally well matched, as were King Charles I, Dean Liddell and the King of Hearts. Even those most sympathetic to royalty, such as the loyal Bishop Kennet, wrote that all regretted "the influence of a stately queen over an affectionate husband."

Many believed that Charles's fatal flaw was submissiveness to the opinions of his Queen, who frequently "precipitated him into hasty and imprudent counsels." Others drew a picture of Queen Henrietta Maria that was not unlike the Queen of Hearts: volatile, haughty, uneducated and unreflective. This was also how the Oxford dean's enemies characterized Lorina Liddell.

PLATO'S TYRANT AND THE HEARTLESS QUEEN Wonderland'S *Republic*-like society is no utopia. It is an underground dystopia. Carroll seems to be (rightly) suggesting that Plato's ideal republic was so abstract and logical that no human could possibly live in it for long. And indeed, *The Republic* portrayed a philosopher's dream that would undoubtedly become a political nightmare if applied to any society of human inhabitants.

The Queen of Hearts is obviously aligned with *The Republic*'s "worst" possible ruler as portrayed in Plato's tyrant's allegory. The word *savage* is used several times in *Wonderland* to describe her. Likewise, Plato's self-indulgent tyrant is possessed of a "terrible, savage and lawless form of desires" that is so extreme, it is the cause of suffering hundreds of times greater than that of the average man. And as we have already observed, Carroll himself described the Queen of Hearts as the "embodiment of ungovernable passion." This unmistakably conforms to Plato's description of the tyrant as being "filled with passion without restraint."

Both the Queen of Hearts and Plato's "worst" ruler hold power by the force of an unquestioning bodyguard. In *The Republic*, we have the unquestioning military auxiliaries, while in *Wonderland*, we have the unquestioning club soldiers. Without hesitation or remorse, the tyrant and the Queen of Hearts both order the execution of friend and foe alike.

Also, Plato informs us, the absolute power of the tyrant brings

absolute misery: "the misery of the despot is really in proportion to the extent and duration of his power." This certainly appears to hold true for the "savage" Queen of Hearts, who, "like a wild beast," is consumed by fits of self-indulgent rage not unlike Plato's tyrant, who, we are told, also behaves like a "savage beast."

Furthermore, when the child Alice eventually overrules the Queen's outrageously childish fitful commands, there is another direct parallel with the tyrant, for in Plato's allegory, "The parent falls into the habit of behaving like the child, and the child like the parent."

And finally, just as Alice discovers she has nothing to fear from the Queen or her henchmen because they are "nothing but a pack of cards," there is a comparable revelation in the tyrant's allegory, when it is revealed—in Allan Bloom's translation—that "this phantom of tyrannical pleasure is without substance."

Alice began to feel very uneasy: to be sure, she had not as yet had any dispute with the Queen, but she knew that it might happen any minute, "and then," thought she, "what would become of me? They're dreadfully fond of beheading people here; the great wonder is, that there's any one left alive!"

She was looking about for some way of escape, and wondering whether she could get away without being seen, when she noticed a curious appearance in the air: it puzzled her very much at first, but after watching it a minute or two, she made it out to be a grin, and she said to herself "It's the Cheshire Cat: now I shall have somebody to talk to."

"How are you getting on?" said the Cat, as soon as there was mouth enough for it to speak with.

Alice waited till the eyes appeared, and then nodded. "It's no use speaking to it," she thought, "till its ears have come, or at least one of them." In another minute the whole head appeared, and then Alice put down her flamingo, and began an account of the game, feeling very glad she had someone to listen to her. The Cat seemed to think that there was enough of it now in sight, and no more of it

appeared.

Just as the plot of *Through the Looking-Glass* was based on a chess game, this chapter of *Wonderland* appears to be linked to some sort of card game. Just what card game has always been in question. The obvious choice would be some form of the game of Hearts. And indeed, as if to confirm this, Tenniel chose to illustrate the Queen of Hearts wearing the pattern of the queen of spades, the most powerful and fatal card in Hearts. However, not much else is comparable. And why are we left with only the King and Queen of Hearts along with Alice at the end of play?

In fact, it seems that the game suggested here is Lewis Carroll's own original card game of Court Circular, the rules of which he published in a pamphlet in 1860. In this game, the highest possible hand is a three-card royal straight flush in hearts—that is, ace, king and queen of hearts. How does Alice fit into this game? Her identity—in terms of card ranking—is hinted at by the King of Hearts.

The King informs the Queen that Alice "is only a child," and, as we have already learned, the numbered heart cards are "the royal children." If we presume that Alice is the youngest child/card, she must be number one—that is, an ace. The rules of Court Circular tell us that the ace may be played as either the lowest or highest card in the suit. And as the ace of hearts, Alice completes the winning hand: a three-card royal flush in hearts.

The other game being played in "The Queen's Croquet-Ground" is, of course, croquet. The trend-setting Liddells installed one of Oxford's first croquet grounds on the Deanery lawn in 1856, the same year the first set of rules for this new game were published in London. In this, they proved to be leaders in fashionable Oxford society, for the next two decades were known as "the era of crinoline croquet," in which parties centering on the game were all the rage.

Croquet became known as "the Queen of Games." The All England Lawn Tennis and Croquet Club was formed in 1868, and annual championships were held at Wimbledon in the 1870s. Croquet outstripped all other games in popularity; a single edition of Jaques's "Croquet: The Laws and Regulations of the Game" sold over sixty

thousand copies in a year. As with his own card game, Lewis Carroll—who seems to have followed every fad—invented and published his own variation of this game, called Croquet Castles. Unlike the Wonderland game, Croquet Castles was not played with flamingos and hedgehogs.

"I don't think they play at all fairly," Alice began, in rather a complaining tone, "and they all quarrel so dreadfully one can't hear oneself speak—and they don't seem to have any rules in particular; at least, if there are, nobody attends to them—and you've no idea how confusing it is all the things being alive; for instance, there's the arch I've got to go through next walking about at the other end of the ground—and I should have croqueted the Queen's hedgehog just now, only it ran away when it saw mine coming!"

"How do you like the Queen?" said the Cat in a low voice.

"Not at all," said Alice: "she's so extremely—" Just then she noticed that the Queen was close behind her, listening: so she went on, "—likely to win, that it's hardly worth while finishing the game."

The Queen smiled and passed on.

"Who are you talking to?" said the King, going up to Alice, and looking at the Cat's head with great curiosity.

"It's a friend of mine—a Cheshire Cat," said Alice: "allow me to introduce it."

"I don't like the look of it at all," said the King: "however, it may kiss my hand if it likes."

"I'd rather not," the Cat remarked.

"Don't be impertinent," said the King, "and don't look at me like that!" He got behind Alice as he spoke.

"A cat may look at a king," said Alice. "I've read that in some book, but I don't remember where."

In *Wonderland*, the Queen of Hearts arbitrarily invites and dismisses whomever she wishes. So when she discovers the uninvited Duchess playing croquet with Alice, she immediately kicks her out of the garden. This hints at the fact that the Oxford Duchess—the bishop of Oxford—

was welcome at the Deanery only on invitation by the Liddells. Christ Church was the only college in England in which both the college and the cathedral were under the authority of the dean. (The only part of Christ Church that the bishop controlled was the great kitchen.) But as a conservative opponent of the dean, the bishop Samuel Wilberforce was tolerated only on special occasions. And just as the Queen of Hearts banished the Duchess at will, Mrs. Liddell could on a whim decide to banish Wilberforce from her croquet garden parties.

"Well, it must be removed," said the King very decidedly, and he called the Queen, who was passing at the moment, "My dear! I wish you would have this cat removed!"

The Queen had only one way of settling all difficulties, great or small. "Off with his head!" she said, without even looking round.

"I'll fetch the executioner myself," said the King eagerly, and he hurried off.

Alice thought she might as well go back, and see how the game was going on, as she heard the Queen's voice in the distance, screaming with passion. She had already heard her sentence three of the players to be executed for having missed their turns, and she did not like the look of things at all, as the game was in such confusion that she never knew whether it was her turn or not. So she went in search of her hedgehog.

The hedgehog was engaged in a fight with another hedgehog, which seemed to Alice an excellent opportunity for croqueting one of them with the other: the only difficulty was, that her flamingo was gone across to the other side of the garden, where Alice could see it trying in a helpless sort of way to fly up into a tree.

By the time she had caught the flamingo and brought it back, the fight was over, and both the hedgehogs were out of sight: "but it doesn't matter much," thought Alice, "as all the arches are gone from this side of the ground." So she tucked it away under her arm, that it might not escape again, and went back for a little more conversation with her friend.

A rather different scenario presented itself with the disturbing

appearance of the floating head of the Cheshire Cat over the croquet ground. Neither the King's nor the Queen's commands to have the head removed are met with success. The Oxford Cheshire Cat was the Reverend Edward Bouverie Pusey, who as a Christ Church canon could not be removed as a college head by the dean. Viewed by Carroll and other conservatives as the spiritual guardian of the college, Pusey kept a watchful eye over the Deanery—just as the Cheshire Cat watched over the Queen's garden.

The floating cat's head is also suggestive of the haunting spirit of the founder of Christ Church, the fifteenth-century Cardinal Thomas Wolsey, who—like the Cat—was also threatened with beheading. It is Wolsey's cardinal's hat with its broad brim and long tassels that surmounts the cats' heads on Christ Church's coat of arms, and it is his spirit that Carroll saw as watching over the college. Indeed, years later, in his squib *The Vision of the Three T's* (1873), Carroll humorously conjured up the ghost of the college's founder: "one of portly form and courtly mien, with scarlet gown, and broad brimmed hat whose strings, wide-fluttering in the breezeless air, at once defied the laws of gravity and marked the reverend Cardinal! 'Twas Wolsey's self!" Carroll had this vision of Wolsey's spirit arise in protest to attack the dean's uninspired design for Christ Church's newly erected belfry.



The cats and the hat: Christ Church's coat of arms.

When she got back to the Cheshire Cat, she was surprised to find quite a large crowd collected round it: there was a dispute going on between the executioner, the King, and the Queen, who were all talking at once, while all the rest were quite silent, and looked very uncomfortable.

The moment Alice appeared, she was appealed to by all three to settle the question, and they repeated their arguments to her, though, as they all spoke at once, she found it very hard indeed to make out exactly what they said.

The executioner's argument was, that you couldn't cut off a head unless there was a body to cut it off from: that he had never had to do such a thing before, and he wasn't going to begin at *his* time of life.

The King's argument was, that anything that had a head could be beheaded, and that you weren't to talk nonsense.

The Queen's argument was, that if something wasn't done about it in less than no time she'd have everybody executed, all round. (It was this last remark that had made the whole party look so grave and anxious.)

Alice could think of nothing else to say but "It belongs to the Duchess: you'd better ask her about it."

"She's in prison," the Queen said to the executioner: "fetch her here." And the executioner went off like an arrow.

The Cat's head began fading away the moment he was gone, and, by the time he had come back with the Duchess, it had entirely disappeared; so the King and the executioner ran wildly up and down looking for it, while the rest of the party went back to the game.



Chapter 9: The Mock Turtle's Story

"She wants for to know your history, she do."





RUSKIN AND THE GRYPHON The Ugly Duchess greets Alice in the Queen's croquet ground by tucking "her arm affectionately into Alice's," and then agreeing with everything she has to say. Alice finds this (rather forced) affection perplexing and blames the Duchess's former bad temper on the fact that her kitchen was filled with pepper. Alice then attempts to construct "a new kind of rule" for determining temperament. She concludes that pepper makes people hot-tempered, vinegar makes them sour, camomile makes them bitter and barley-sugar makes them sweet-tempered.

Alice has essentially reinvented the ancient theory of the four humours—the four types of human temperament: sanguine, choleric, phlegmatic and melancholic. The ancient Greek school of Hippocrates, the father of medicine, held that all illness was the result of an imbalance in the body of the four humours, fluids that in health were naturally equal in proportion. The four humours were believed to be blood, black bile, yellow bile and phlegm. An imbalance (*dyscrasia*, or "bad mixture") made a person ill. Hippocratic therapy was directed toward restoring balance. For example, citrus was thought to be beneficial when phlegm was overabundant. Or in Alice's comic version, barley-sugar should make one "sweet-tempered."

THE MOCK TURTLE'S STORY.

"You can't think how glad I am to see you again, you dear old thing!" said the Duchess, as she tucked her arm affectionately into Alice's, and they walked off together.

Alice was very glad to find her in such a pleasant temper, and thought to herself that perhaps it was only the pepper that had made her so savage when they met in the kitchen.

"When *I'm* a Duchess," she said to herself (not in a very hopeful tone though), "I won't have any pepper in my kitchen *at all*. Soup does very well without—Maybe it's always pepper that makes people hot-tempered," she went on, very much pleased at having found out a new kind of rule, "and vinegar that makes them sour—and camomile that makes them bitter—and—and barley-sugar and

such things that make children sweet-tempered. I only wish people knew that: then they wouldn't be so stingy about it, you know—"

She had quite forgotten the Duchess by this time, and was a little startled when she heard her voice close to her ear. "You're thinking about something, my dear, and that makes you forget to talk. I can't tell you just now what the moral of that is, but I shall remember it in a bit."

We still use the terminology of humours to describe psychological aspects of the human character. Individuals with sanguine temperaments are extroverted and social; choleric people have energy, passion and charisma; phlegmatic temperaments are characterized by dependability, gentility and affection; and melancholics are creative, kind and considerate.

The four humours as emblematic themes have been adapted many times in art and literature. Carroll himself wrote a satirical poem, "Melancholetta," about a muse-like figure who appears to be a comic take on Dürer's famous meditative and highly symbolic alchemical engraving *Melencolia I*.

We might conclude that in Carroll's view, the behaviour of the real-life Duchess, the "Holy Terror" Bishop Wilberforce, depended more on context than temperament. On his own ground in the great kitchen, Wilberforce could be confident, intimidating and argumentative. But on entering the garden of the Christ Church Deanery, painfully aware he was there by invitation only, he became fawning, agreeable to all and subservient to the authority of the dean's wife, who on a whim might arbitrarily banish him from Oxford society.

"Perhaps it hasn't one," Alice ventured to remark.

"Tut, tut, child!" said the Duchess. "Everything's got a moral, if only you can find it." And she squeezed herself up closer to Alice's side as she spoke.

Alice did not much like keeping so close to her: first, because the Duchess was *very* ugly; and secondly, because she was exactly the right height to rest her chin upon Alice's shoulder, and it was an uncomfortably sharp chin. However, she did not like to be rude, so

she bore it as well as she could.

"The game's going on rather better now," she said, by way of keeping up the conversation a little.

" 'Tis so," said the Duchess: "and the moral of that is—'Oh, 'tis love, 'tis love, that makes the world go round!' "

"Somebody said," Alice whispered, "that it's done by everybody minding their own business!"

"Ah, well! It means much the same thing," said the Duchess, digging her sharp little chin into Alice's shoulder as she added, "and the moral of that is—'Take care of the sense, and the sounds will take care of themselves.'

"How fond she is of finding morals in things!" Alice thought to herself.

"I dare say you're wondering why I don't put my arm round your waist," the Duchess said after a pause: "the reason is, that I'm doubtful about the temper of your flamingo. Shall I try the experiment?"

"He might bite," Alice cautiously replied, not feeling at all anxious to have the experiment tried.

"Very true," said the Duchess: "flamingoes and mustard both bite. And the moral of that is—'Birds of a feather flock together.'"

"Only mustard isn't a bird," Alice remarked.

The Duchess falls over herself with inventing absurd reasons for being agreeable. Clearly this is a parody of some of the Victorian parlour games familiar to Alice and her sisters. The Duchess recites puns, malapropisms and muddled clichés, and then attempts to extract morals from them (as in a popular parlour game called Proverbs). When the Duchess proposes the nonsensical moral "Take care of the sense, and the sounds will take care of themselves," she is reciting a warped version of the proverb "Take care of the pence and the pounds will take care of themselves."

Alice tries to apply logical categories to the Duchess's nonsensical sayings—"It's a mineral, I *think*"; "It's a vegetable"—and in so doing reinvents another well-known parlour game, Animal, Vegetable, Mineral. In this, a player must guess what thing the other has in mind by asking

up to twenty yes-or-no questions, starting with "Is it animal, vegetable or mineral?"

After enduring the cloying presence of the Duchess for some time, Alice witnesses the arrival of the Queen of Hearts, who disposes of the Duchess "in about half no time." The Queen then removes Alice from her croquet ground and leaves her in the care and domain of two monsters.

The Queen's action is made clear within the context of Greek mythology. The Greek underworld—like Wonderland's royal garden—was divided into discrete regions. Beyond the Garden of Elysium, where those judged to be the blessed played at games, there was another realm, in which the souls of the damned were tortured and set upon by monsters. This Greek hell was known as Tartarus.

"Right, as usual," said the Duchess: "what a clear way you have of putting things!"

"It's a mineral, I think," said Alice.

"Of course it is," said the Duchess, who seemed ready to agree to everything that Alice said; "there's a large mustard-mine near here. And the moral of *that* is—'The more there is of mine, the less there is of yours.'

"Oh, I know!" exclaimed Alice, who had not attended to this last remark, "it's a vegetable. It doesn't look like one, but it is."

"I quite agree with you," said the Duchess; "and the moral of that is—'Be what you would seem to be'—or if you'd like it put more simply—'Never imagine yourself not to be otherwise than what it might appear to others that what you were or might have been was not otherwise than what you had been would have appeared to them to be otherwise.'

"I think I should understand that better," Alice said very politely, "if I had it written down: but I can't quite follow it as you say it."

"That's nothing to what I could say if I chose," the Duchess replied, in a pleased tone.

"Pray don't trouble yourself to say it any longer than that," said Alice.

"Oh, don't talk about trouble!" said the Duchess. "I make you a present of everything I've said as yet."

"A cheap sort of present!" thought Alice. "I'm glad they don't give birthday presents like that!" But she did not venture to say it out loud.

"Thinking again?" the Duchess asked, with another dig of her sharp little chin.

"I've a right to think," said Alice sharply, for she was beginning to feel a little worried.

In the sixth book of Virgil's *Aeneid*, in Theodore C. Williams's translation, the Sibyl guides the Trojan hero Aeneus in his descent into the underworld: "Here comes the place where cleaves our way in twain. Thy road, the right, toward Pluto's dwelling goes, And leads us to Elysium. But the left Speeds sinful souls to doom, and is their path To Tartarus th'accurst."

Not wishing to unduly frighten children, Carroll made the punishments in Wonderland's Tartarus somewhat milder and its monsters less ferocious. Consequently, Alice moves from the Elysium-like croquet lawns where games go on forever to a region where a child must endure for eternity the torture of school lessons.

"Just about as much right," said the Duchess, "as pigs have to fly; and the m—"

But here, to Alice's great surprise, the Duchess's voice died away, even in the middle of her favourite word "moral," and the arm that was linked into hers began to tremble. Alice looked up, and there stood the Queen in front of them, with her arms folded, frowning like a thunderstorm.

"A fine day, your Majesty!" the Duchess began in a low, weak voice.

"Now, I give you fair warning," shouted the Queen, stamping on the ground as she spoke; "either you or your head must be off, and that in about half no time! Take your choice!"

The Duchess took her choice, and was gone in a moment.

"Let's go on with the game," the Queen said to Alice; and Alice was too much frightened to say a word, but slowly followed her back to the croquet-ground.

The other guests had taken advantage of the Queen's absence, and were resting in the shade: however, the moment they saw her, they hurried back to the game, the Queen merely remarking that a moment's delay would cost them their lives.

All the time they were playing the Queen never left off quarrelling with the other players, and shouting "Off with his head!" or "Off with her head!" Those whom she sentenced were taken into custody by the soldiers, who of course had to leave off being arches to do this, so that by the end of half an hour or so there were no arches left, and all the players, except the King, the Queen, and Alice, were in custody and under sentence of execution.

Then the Queen left off, quite out of breath, and said to Alice, "Have you seen the Mock Turtle yet?"

"No," said Alice. "I don't even know what a Mock Turtle is."
"It's the thing Mock Turtle Soup is made from," said the Queen.

For a child, what could be more like paradise than eternal games? What could be more like hell than eternal school lessons? What could be more comically monstrous than the Gryphon and the Mock Turtle, Carroll's two ridiculous parodies of pedantic schoolmasters who relentlessly torment Alice by engaging her in a barrage of never-ending lessons?

The Queen turns Alice over to the care of these two grotesque monsters. We first encounter the Gryphon, but the Queen appears more concerned that Alice be introduced to the Mock Turtle. And we find, in the original *Alice's Adventures Under Ground*, that the Queen is given the second title of Marchioness of Mock Turtles.

"I never saw one, or heard of one," said Alice.

"Come on, then," said the Queen, "and he shall tell you his history."

As they walked off together, Alice heard the King say in a low voice, to the company generally, "You are all pardoned." "Come, that's a good thing!" she said to herself, for she had felt quite unhappy at the number of executions the Queen had ordered.

They very soon came upon a Gryphon, lying fast asleep in the

sun. (If you don't know what a Gryphon is, look at the picture.) "Up, lazy thing!" said the Queen, "and take this young lady to see the Mock Turtle, and to hear his history. I must go back and see after some executions I have ordered"; and she walked off, leaving Alice alone with the Gryphon. Alice did not quite like the look of the creature, but on the whole she thought it would be quite as safe to stay with it as to go after that savage Queen: so she waited.

The Gryphon sat up and rubbed its eyes: then it watched the Queen till she was out of sight: then it chuckled. "What fun!" said the Gryphon, half to itself, half to Alice.

"What is the fun?" said Alice.

"Why, she," said the Gryphon. "It's all her fancy, that: they never executes nobody, you know. Come on!"

The Mock Turtle is a composite creature with the shell and front flippers of a turtle and the head, hind hooves and tail of a calf. In *Wonderland*, the Mock Turtle exists because of a pseudo-logical joke: if turtle soup is made from turtles, then mock turtle soup must be made from mock turtles. Except mock turtle soup is actually made with veal, which explains why Tenniel's illustration gives the creature a calf's head, hooves and tail.



As for the Mock Turtle's real-life identity, Carroll himself confirmed that it was his friend and colleague the Reverend Henry Parry Liddon (1829–1890). In this, Carroll again indulges his fondness for appallingly bad puns: a turtle is an animal with a lid on. In "The New Belfry of Christ Church," Carroll makes use of this same pun. In reference to the rumour attributing the cubic design of the wooden belfry to Liddon, Carroll asks: "Was it a Professor who designed this box, which, whether with a lid on or not, equally offends the eye?"

Henry Liddon was Lewis Carroll's travelling companion when he visited Russia and the continent in 1867, his only voyage abroad. And as the biographer and disciple of Edward Bouverie Pusey (the Oxford Cheshire Cat), Liddon also appears in two of Carroll's squibs. In "The New Method of Evaluation, as Applied to π ," Liddon and Pusey appear as geometric coordinates: "It was now necessary to investigate the locus of EBP [Edward Bouverie Pusey]: this was found to be a species of Catenary.... The locus of HPL [Henry Parry Liddon] will be found almost entirely to coincide with this." In "The Blank Cheque," Henry Liddon appears as a lad called Harry-Parry, of whom we are told "Harry's very fond of Pussy"—Pusey—who is the "much-enduring parlour-cat."



Henry Liddon: Name was a gift to the pun-loving Carroll.

"Everybody says 'come on!' here," thought Alice, as she went slowly after it: "I never was so ordered about in all my life, never!"

They had not gone far before they saw the Mock Turtle in the distance, sitting sad and lonely on a little ledge of rock, and, as they came nearer, Alice could hear him sighing as if his heart would break. She pitied him deeply. "What is his sorrow?" she asked the Gryphon, and the Gryphon answered, very nearly in the same words as before, "It's all his fancy, that: he hasn't got no sorrow, you know. Come on!"

So they went up to the Mock Turtle, who looked at them with

large eyes full of tears, but said nothing.

"This here young lady," said the Gryphon, "she wants for to know your history, she do."

"I'll tell it her," said the Mock Turtle in a deep, hollow tone. "Sit down, both of you, and don't speak a word till I've finished."

So they sat down, and nobody spoke for some minutes. Alice thought to herself, "I don't see how he can *even* finish, if he doesn't begin." But she waited patiently.



The Rev. Liddon: Caricatured as "High Church" in Vanity Fair.

For twenty years Liddon was the resident canon of St. Paul's Cathedral, where by means of his charismatic and emotive oration he attracted a vast congregation of three to four thousand. His sermons were so emotive, he frequently moved his parishioners to tears. In *Wonderland*, however, the Mock Turtle seems capable of moving only himself to tears. It must have amused the stuttering Dodo Dodgson to portray the great orator Henry Parry Liddon as a literary trope—a creature that exists only as a figure of speech.

PLATO'S TURTLE AND ARISTOTLE'S GRYPHON Lewis Carroll shared Plato's addiction to puns. Translator Trevor J. Saunders observes that in Plato's *The Laws* the dialogue is full of "elephantine punning and other kinds of word-play, usually impossible to reproduce in English." Peter Heath, in his *Philosopher's Alice*, directly links Plato to the mock turtle and the Gryphon passages of *Wonderland*, in

which Carroll makes "what is probably the direct collection of bad puns and false etymologies since Plato's *Cratylus*."

Furthermore, the mock turtle and the Gryphon of *Wonderland* are comparable to the guardians of Plato's *Republic*. Plato (427–347 BC) and Aristotle (384–322 BC) were the masters of the two great schools of philosophy in Athens, the Academy and the Lyceum, respectively. Like the mock turtle and the Gryphon, they were in the employ of royalty: Plato in the court of Dion of Syracuse, Aristotle in the court of Alexander the Great of Macedonia.

Given that Carroll himself outed the Oxford mock turtle as the Reverend Liddon with that "lid on" pun about the creature's shell, we can be forgiven for searching for the philosophic mock turtle's identity by means of an equally appalling pun. So let us suggest that the mock turtle is Plato because a turtle is an animal shaped both like a plate and an O.

Taking another clue from the punning explanation by the mock turtle that the Old Turtle was called a tortoise because he "taught us," we may also conclude that in *Wonderland*, "turtle" implies teacher or philosopher. Consequently, we have another possible Carrollian pun on the name of Aristotle: Aris-turtle—*aris* in Greek means "top," "best" or "first," thus "best teacher" or "first philosopher." Certainly, there was competition between Plato and Aristotle over who was ranked the top philosopher.

Also, the Gryphon's lecturing style is similar to that of Aristotle who is believed to have walked as he lectured to his students. He lectured on the grounds of the Lyceum in Athens which became known as the Peripatetic school of philosophy. Furthermore, this (possibly mistaken) belief in Aristotle's approach to teaching was consciously adopted by the Oxford Gryphon, John Ruskin, in his famous long outdoor walking-tour lectures.



Plato and Aristotle: Turtle and tortoise.



Beatrice Addressing Dante from the Car, by William Blake, circa 1825.

"Once," said the Mock Turtle at last, with a deep sigh, "I was a real Turtle."

These words were followed by a very long silence, broken only by an occasional exclamation of "Hjckrrh!" from the Gryphon, and the constant heavy sobbing of the Mock Turtle. Alice was very nearly getting up and saying, "Thank you, sir, for your interesting story," but she could not help thinking there *must* be more to come, so she sat still and said nothing.

"When we were little," the Mock Turtle went on at last, more calmly, though still sobbing a little now and then, "we went to school in the sea. The master was an old Turtle—we used to call him Tortoise—"

"Why did you call him Tortoise, if he wasn't one?" Alice asked.

"We called him Tortoise because he taught us," said the Mock Turtle angrily. "Really you are very dull!"

"You ought to be ashamed of yourself for asking such a simple question," added the Gryphon; and then they both sat silent and looked at poor Alice, who felt ready to sink into the earth. At last the Gryphon said to the Mock Turtle, "Drive on, old fellow! Don't be all day about it!" and he went on in these words:

"Yes, we went to school in the sea, though you mayn't believe it ___"

"I never said I didn't!" interrupted Alice.

The Gryphon too is an imaginary beast, found only in heraldry and literature—notably the underworlds of the *Aeneid* and *The Divine Comedy*. It is a monster with the head and wings of an eagle and the body of a lion. Its name is most commonly spelled *griffin*, but Carroll chose the spelling used by Lucius Apuleius, the Roman author of *The Golden Ass*. This may be because that book's gryphon is directly linked to the Eleusinian Mysteries. Described as the "Hyperborean gryphon," it is one of the creatures in the grand procession in Lucius's account of the Mysteries of the Great Goddess. Furthermore, Lucius Apuleius was the author of a famous lost text entitled *Liber ludicorum et gryphorum*, a title usually translated as "The Book of Enigmas."

Certainly, the Gryphon is an enigma who is partnered with an even greater enigma in the form of the absurd logic-chopping monster that is the Mock Turtle. There is little doubt that the real-life Oxford Gryphon was John Ruskin (1819–1900), the greatest art critic and philosopher of art history of his time. The hugely popular author of *The Stones of Venice* was an honorary Fellow of Christ Church and the Slade Professor of Fine

Art at Oxford.

Ruskin had been an undergraduate at Oxford's Trinity College, where the griffin appears on the college's coat of arms and main gate. Furthermore, a well-known passage in Ruskin's *Modern Painters* favourably compares Gothic sculptures of "true" griffins, with the classically conceived "false" griffin sculptures of ancient Rome. Ruskin's mentor as an undergraduate had been the future dean of Christ Church—and future father of Alice Liddell. Dean Henry Liddell and Ruskin remained lifelong friends and colleagues. For a time, Ruskin was Alice's drawing teacher. As such, he also served as the model for Wonderland's "old conger-eel" who "used to come once a week" to the Gryphon and the Mock Turtle's school to teach "Drawling, Stretching, and Fainting in Coils" (drawing, sketching and painting in oils).



John Ruskin: The great critic had been mentored by Alice's father.

"You did," said the Mock Turtle.

"Hold your tongue!" added the Gryphon, before Alice could speak again. The Mock Turtle went on.

"We had the best of educations—in fact, we went to school every day—"

"I've been to a day-school, too," said Alice; "you needn't be so proud as all that."

"With extras?" asked the Mock Turtle a little anxiously.

"Yes," said Alice, "we learned French and music."

"And washing?" said the Mock Turtle.

"Certainly not!" said Alice indignantly.

"Ah! Then yours wasn't a really good school," said the Mock Turtle in a tone of great relief. "Now at *ours* they had at the end of the bill, 'French, music, and washing—extra.' "

"You couldn't have wanted it much," said Alice; "living at the bottom of the sea."

"I couldn't afford to learn it," said the Mock Turtle with a sigh. "I only took the regular course."

"What was that?" inquired Alice.

Like Carroll, Ruskin had an obsession with young girls. And like Carroll, he wrote a fairy tale (*The King of the Golden River*) for a twelve-year-old child. Five years later, that child, Euphemia (Effie) Gray, would become Ruskin's wife. However, the marriage was not a success, and after another five years, it was annulled on the grounds of non-consummation. Shortly thereafter, in 1855, Effie married Ruskin's protégé, the Pre-Raphaelite artist John Everett Millais. Ruskin—again like Carroll—was to remain a virgin all his life.

TWO PRIM MISSES Although many aspects of *Wonderland* are parodies of Plato's *Republic*, the logician Charles Dodgson was a champion of Aristotle. If any single discipline dominated Dodgson's life, it was Aristotelian, or syllogistic, logic—although it was often at odds with the more mystical aspects of Platonic thought.

Dodgson's *Symbolic Logic* was dedicated "to the memory of Aristotle." And in the introduction to that book, he wrote: "Since Aristotle, logicians have tried to formulate those rules underlying arguments which, when followed, will ensure that only true conclusions are drawn from true premises. These are called the rules of true argument." It is in the manipulation of these rules of true argument that Lewis Carroll has great sport in *Wonderland*.

Aristotle's first book, *Categories*, which established the rank and order of things as genus, species and attributes, was Dodgson's logician's bible. The philosopher's second book, *Prior Analytics*—the first treatise ever written on formal logic—was his user's handbook.

Aristotle's system of logic provided the standard model of logic right up until Carroll's day, when new algebraic tools began to transform it.

Syllogistic logic is based on the idea that the conclusion to a valid argument is reached by way of two or more premises, or statements of fact. Or, as a character in Carroll's *Sylvie and Bruno* explains to a young lady, a "Sillygism" is that in which "two prim Misses" produce a "Delusion." In fact, Carroll's description of a "Sillygism" goes a long way toward explaining one aspect of his humour. It is a trick Carroll used in all of his writings to confuse and amuse. The result inevitably was dialogues that sound sensible because they appear to be logically constructed. However, as Carroll wrote in his *Curiosa Mathematica*, "the *validity* of a Syllogism is quite independent of the *truth* of its Premisses."

When Carroll brings the grammar and vocabulary of formal logic into ordinary language, he actually does create a "delusion"—that is, something that in formal language is logically correct but in ordinary language is patently not true. The usual result is a statement both absurd and comic.

"Reeling and Writhing, of course, to begin with," the Mock Turtle replied; "and then the different branches of Arithmetic—Ambition, Distraction, Uglification, and Derision."

"I never heard of 'Uglification,' " Alice ventured to say. "What is it?"

The Gryphon lifted up both its paws in surprise. "What! Never heard of uglifying!" it exclaimed. "You know what to beautify is, I suppose?"

"Yes," said Alice doubtfully: "it means—to—make—anything—prettier."

"Well, then," the Gryphon went on, "if you don't know what to uglify is, you are a simpleton."

Alice did not feel encouraged to ask any more questions about it, so she turned to the Mock Turtle, and said "What else had you to learn?"

"Well, there was Mystery," the Mock Turtle replied, counting off the subjects on his flappers, "—Mystery, ancient and modern, with Seaography: then Drawling—the Drawling-master was an old conger-eel, that used to come once a week: he taught us Drawling, Stretching, and Fainting in Coils."

"What was that like?" said Alice.

"Well, I can't show it you myself," the Mock Turtle said: "I'm too stiff. And the Gryphon never learnt it."

"Hadn't time," said the Gryphon: "I went to the Classics master, though. He was an old crab, *he* was."

"I never went to him," the Mock Turtle said with a sigh. "He taught Laughing and Grief, they used to say."

In 1855—the same year Carroll first caught sight of Alice Liddell—the wealthy Irish La Touche family asked Ruskin to give drawing lessons to their ten-year-old daughter, Rose. Ruskin appears to have promptly fallen in love with Rose La Touche, but patiently waited until she was eighteen (and he was forty-seven) before making an unsuccessful proposal of marriage. Nonetheless, he remained infatuated, and after her early death at the age of twenty-seven, the bereft Ruskin spent years attempting to psychically communicate with her departed spirit.

There are other obscure puns here, one in Greek. When Alice first meets the Mock Turtle she hears him "sighing as if his heart would break." She sympathetically asks: "What is his sorrow?" In reply, the Gryphon explains, "It's all his fancy, that: he hasn't got no sorrow, you know."

Here is a bilingual pun that also crosses over with the language of classical logic: it isn't *sorrow* the Turtle hasn't got but *soro*, the Greek for "a heap" and the root of *sorites*, a chain of syllogisms, the conclusion of each forming a premise of the next. In the formal language of logic, a heap is a quantity of similar things placed together. But the Mock Turtle has no heap; he has no quantity, no material existence, whatever.

This explains the chapter's title, "The Mock Turtle's Story." It is another of Carroll's dire puns: the Mock Turtle's story is no story at all. It is an "M.T." story, or "empty" story. The Mock Turtle is a nonentity and a category without content. He is what logicians know as a "null class,"

which explains why his classes were lessons that "lessen from day to day" until nothing remains.

"So he did," said the Gryphon, sighing in his turn; and both creatures hid their faces in their paws.

"And how many hours a day did you do lessons?" said Alice, in a hurry to change the subject.

"Ten hours the first day," said the Mock Turtle: "nine the next, and so on."

"What a curious plan!" exclaimed Alice.

"That's the reason they're called lessons," the Gryphon remarked: "because they lessen from day to day."

This was quite a new idea to Alice, and she thought it over a little before she made her next remark. "Then the eleventh day must have been a holiday?"

"Of course it was," said the Mock Turtle.

"And how did you manage on the twelfth?" Alice went on eagerly.

"That's enough about lessons," the Gryphon interrupted in a very decided tone. "Tell her something about the games now."

Everything about this strange school "in the sea" is a scrambled version of subjects taught in terrestrial schools. Students were taught "Reeling and Writhing" (reading and writing), "Ambition, Distraction, Uglification, and Derision" (addition, subtraction, multiplication and division), "Mystery" and "Seaography" (history and geography), "Drawling, Stretching, and Fainting in Coils" (which we met earlier) and "Laughing and Grief" (a double pun that combines Latin and Greek with comedy and tragedy).

The British public school system is not the only target of Carroll's satire here. The Wonderland Gryphon also attacks the real-life Oxford Gryphon John Ruskin's great theme of beautification by transforming it into a gospel of "Uglification." In the opinion of the reactionary conservative Lewis Carroll, the liberalizing changes being forced on the ancient and hallowed institutions of learning at Oxford were like those

described by the Mock Turtle and the Gryphon—empty and ugly. Carroll's conservative politics appear to have quite blinded him to the immense good work Ruskin did by inspiring appreciation of the arts and broadening the availability of education at all levels.

Ruskin's influence on art, architecture, literature and social change was remarkable. He was the inspiration for and champion of the Pre-Raphaelites, Christian Socialists, Working Men's Colleges and the Arts and Crafts movement, as well as the advancement of education of working-class children, women and men.

Chapter 10: The Lobster Quadrille

"How the creatures order one about, and make one repeat lessons!"





STALKING TENNYSON After all those lessons that lessened and lessened, the Gryphon and the mock turtle decide Alice must be given instructions in song and dance. They begin with their crazed demonstration of the lobster Quadrille, a parody of the Lancers Quadrille, a popular dance that would have been familiar to the Liddell girls.

Not coincidentally, our Oxford Gryphon, John Ruskin, recorded in his memoirs that among the happiest times of his life were those spent at Winnington Hall school for girls, in Cheshire, of which he was a major patron and where he was known to join in with the girls' dances. In 1861, at the time of the first of his many visits to this progressive school, Ruskin wrote to his father: "they dance like Dryads. I never saw any dancing at once so finished & so full of life." Georgiana, wife of the Pre-Raphaelite painter Edward Burne-Jones, recorded a scene reminiscent of the lobster Quadrille: "Ruskin joined the Quadrille looking very tall and thin, scarcely more than a black line amongst ... the white [dresses of the] girls." (Coincidentally, Ruskin's lecture on the education of young girls was entitled "Of Queens' Gardens" and was published the same year as *Wonderland*).

THE LOBSTER QUADRILLE.

The Mock Turtle sighed deeply, and drew the back of one flapper across his eyes. He looked at Alice, and tried to speak, but for a minute or two sobs choked his voice. "Same as if he had a bone in his throat," said the Gryphon; and it set to work shaking him and punching him in the back. At last the Mock Turtle recovered his voice, and, with tears running down his cheeks, he went on again:—

"You may not have lived much under the sea—" ("I haven't," said Alice) "—and perhaps you were never even introduced to a lobster—" (Alice began to say "I once tasted—" but checked herself hastily, and said "No, never") "—so you can have no idea what a delightful thing a Lobster Quadrille is!"

The lessons in "The lobster Quadrille" are followed by a series of songs

and recitations that the Liddell sisters would easily recognize as parodies of poems and songs they knew well. The mock turtle's song to accompany the lobster dance lampoons "The Spider and the Fly" (1829) by Mary Botham Howitt. Next Alice is commanded to recite another well-known poem, "The Sluggard." This was written in 1715 by Isaac Watts, author of the didactic poem "Against Idleness and Mischief"—about a "busy Bee"—that was parodied earlier by Alice as the crocodile poem. Alice finds that her mind is so filled with fishy ideas in this seaside academy that instead of " Tis the voice of the sluggard; I heard him complain," she begins with, " Tis the voice of the lobster; I heard him declare."



John Everett Millais: Allegedly alluded to in "Lobster."

In the original and more personal version of the fairy tale, *Alice's Adventures Under Ground*, the mock turtle sings a different song:

Beneath the waters of the sea Are lobsters thick as thick can be—They love to dance with you and me,
My own, my gentle Salmon!

Chorus:

Salmon, come up! Salmon, go down! Salmon, come twist your tail around! Of all the fishes of the sea

There's none so good as Salmon!

This spoofs a then-popular minstrel song with a chorus beginning, "Sally come up! Sally go down! / Sally come twist your heel around!" The three Liddell sisters sang it on the very day before the river journey of July 4, 1862 that inspired *Wonderland*. Carroll's diary of July 3 reads: "I went to lunch at the Deanery, after which we were to have gone down the river with the children, but as it rained, we remained to hear some music and singing instead. The three sang 'Sally come up' with great spirit."

"No, indeed," said Alice. "What sort of a dance is it?"

"Why," said the Gryphon, "you first form into a line along the seashore—"

"Two lines!" cried the Mock Turtle. "Seals, turtles, salmon, and so on; then, when you've cleared all the jelly-fish out of the way—"

"That generally takes some time," interrupted the Gryphon.

"—you advance twice—"

"Each with a lobster as a partner!" cried the Gryphon.

"Of course," the Mock Turtle said: "advance twice, set to partners __"

"—change lobsters, and retire in same order," continued the Gryphon.

"Then, you know," the Mock Turtle went on, "you throw the—"

"The lobsters!" shouted the Gryphon, with a bound into the air.

"—as far out to sea as you can—"

"Swim after them!" screamed the Gryphon.

"Turn a somersault in the sea!" cried the Mock Turtle, capering wildly about.

"Change lobsters again!" yelled the Gryphon at the top of its voice.

The mock turtle's "Beautiful Soup" is a parody of another song sung by the Liddell sisters. Carroll's diary informs us that on August 1, 1862, the girls performed for him the song "Beautiful Star." This would be "Star of the Evening" (1855) by the American composer James M. Sayles, with its chorus, "Beautiful star, / Beautiful star, / Star of evening, beautiful star."

There have been many attempts to match the creatures of the seashore academy with Victorian artists, particularly members of the Pre-Raphaelite Brotherhood. Jo Elwyn Jones and J. Francis Gladstone, authors of *The Red King's Dream*, claim to have found allusions in "Voice of the lobster" to the Pre-Raphaelites Edward Burne-Jones, John Everett Millais, Ford Madox Brown, Dante Gabriel Rossetti and William Morris.

THE UNDER GROUND SALMON The appearance of the "Salmon, come up" song in *Alice's Adventures Under Ground* may have another level of allusion beyond the "Sally come up" minstrel song. Just as *Wonderland*'s bat in "Twinkle, twinkle, little bat" is generally accepted as an allusion to Carroll's mathematics tutor and mentor Bartholomew "Bat" Price, it is likely that the salmon in "Salmon, come up" is an allusion to noted mathematician George Salmon (1819–1904).

A decade before the publication of *Wonderland*, in his diary Carroll recorded his first encounter with what he called "Salmon's Algebraic Geometry—A Treatise on Conic Sections." Salmon's book was the highly respected standard text at that time and remained so for many years. In his diaries of 1855, we find a perplexed Carroll writing: "Went over the first 30 pages of Salmon. I talked over 'Calculus of Variations' with Price today, but without any effect. I see no prospect of understanding the subject at all."

Nonetheless, he persisted over the next two years, slogging through chapter after chapter in reading circles and tutorials with other students and Bartholomew Price. This study appears to have transformed Carroll's opinion of Salmon to one of admiration; as the song states, "There's none so good as Salmon!"

In 1866, Carroll wrote a treatise, "Condensation of Determinants, Being a New and Brief Method for Computing their Arithmetical Values," as an improved method of "condensation." Then, in 1867, two years after the publication of *Wonderland*, he published a larger

work, An Elementary Treatise on Determinants, with their Application to Simultaneous Linear Equations and Algebraical Geometry.

The Carrollian mathematical scholar Francine Abeles believes there must be a link between the Alice books and Carroll's work on determinants. The editor of his journals, Edward Wakeling, agreed, and suggested that Carroll's "method of condensation is like Alice shrinking as a result of drinking from the bottle marked 'drink me.' A large array of numbers gradually shrinks in size until a single number remains: the determinant."

Carroll was constantly indulging in mathematical nonsense based on puns and wordplay. There is an entirely silly episode in his *Sylvie and Bruno* wherein a professor draws "a long line upon the black board, and marking it with the letters 'A,' 'B,' at the two ends, and 'C' in the middle," says, "If AB were to be divided into two parts at C—" The fairy child Bruno confidently interrupts to say that the bee —"the bumble-bee," as he says—"would be drowned" and "the two bits would sink down in the sea."



During the *Wonderland* years, Charles Dodgson found his way into the company of each of these famous artists, and virtually every other major figure in the world of art and literature to whom he was able to gain

access. The popular view of Dodgson as a reclusive and shy Oxford mathematics don who shunned adult company could not be further from the truth.

In 1851, the same year that he became a resident of Christ Church, he visited the Great Exhibition—the first world's fair—in the Crystal Palace originally erected in Hyde Park, London. Of the exhibition, filled with all the wonders of the age, Dodgson wrote: "It looks like a sort of fairyland. As far as you can look in any direction, you see nothing but … long avenues of statues, fountains, canopies, etc., etc.,"

"Back to land again, and that's all the first figure," said the Mock Turtle, suddenly dropping his voice; and the two creatures, who had been jumping about like mad things all this time, sat down again very sadly and quietly, and looked at Alice.

"It must be a very pretty dance," said Alice timidly.

"Would you like to see a little of it?" said the Mock Turtle.

"Very much indeed," said Alice.

"Come, let's try the first figure!" said the Mock Turtle to the Gryphon. "We can do without lobsters, you know. Which shall sing?"

"Oh, you sing," said the Gryphon. "I've forgotten the words."

So they began solemnly dancing round and round Alice, every now and then treading on her toes when they passed too close, and waving their forepaws to mark the time, while the Mock Turtle sang this, very slowly and sadly:—

After dashing off a long account of the exhibition, Dodgson wrote his sister that he must now "go to the Royal Academy, so must stop," but added: "On Tuesday to Tunbridge Wells, on Thursday to Gordon Square till Monday, on Monday to ... Hastings.... Last night I dined with the Stones, and afterwards to a music party at the Watsons. Some day, I forget which, I am to a music party at the Campbells. Also Mr. Brinley Richards' concert. Today I am going with my Aunt to "The Diorama of Jerusalem.' "Obviously, this is not the account of the life of a shy recluse.

Throughout the 1850s, '60s and '70s, Dodgson was a "virtual

gadabout," as Carroll's biographer Morton N. Cohen politely phrases it. In fact, Dodgson was a relentless stalker of celebrities, or, to use the jargon of the day, a lionizer. From his undergraduate days at Oxford onward, he regularly wrote home to his sisters about his success on his latest "lion hunting" expeditions.

"Will you walk a little faster?" said a whiting to a snail.

"There's a porpoise close behind us, and he's treading on my tail.

See how eagerly the lobsters and the turtles all advance! They are waiting on the shingle—will you come and join the dance?

Will you, won't you, will you, won't you, will you join the dance? Will you, won't you, will you, won't you join the dance?

"You can really have no notion how delightful it will be When they take us up and throw us, with the lobsters, out to sea!" But the snail replied "Too far, too far!" and gave a look askance—Said he thanked the whiting kindly, but he would not join the dance.

Would not, could not, would not, would not join the dance.

Would not, could not, would not, could not join the dance.

"What matters it how far we go?" his scaly friend replied.

"There is another shore, you know, upon the other side.

The further off from England the nearer is to France—

Then turn not pale, beloved snail, but come and join the dance.

Will you, won't you, will you, won't you, will you join the dance? Will you, won't you, will you, won't you join the dance?"



"A sort of fairyland": The Great Exhibition (Interior), by George Baxter, 1851.

Again to quote Cohen, Dodgson was "at heart a gadgeteer, an amateur inventor, a devotee of technological progress." Like his maternal uncle and mentor Skeffington Lutwidge, the Commissioner in Lunacy, Dodgson was fascinated with gadgets and instruments of science. Lutwidge possessed microscopes, telescopes, lathes, crest stamps, magic lanterns, cameras obscura, peep show toys and a multitude of other gadgets that set a pattern of collecting for the young Charles. Dodgson was obsessed with all the fads and fancies of the day, and invented and published scores of pamphlets of new word games, card games, croquet games, tennis scoring systems, novel billiard games, anagrams, riddles and rhymes. He sought publication in all the magazines, including *Vanity Fair, Punch, The Train, The Lady* and *Bell's Life in London and Sporting Chronicle*. He wrote letters to newspapers on every conceivable subject: lunar observations, timekeeping, horse betting, censorship, the war in Crimea and colonists on Tristan de Cunha.

"Thank you, it's a very interesting dance to watch," said Alice, feeling very glad that it was over at last: "and I do so like that

curious song about the whiting!"

"Oh, as to the whiting," said the Mock Turtle, "they—you've seen them, of course?"

"Yes," said Alice, "I've often seen them at dinn—" she checked herself hastily.

"I don't know where Dinn may be," said the Mock Turtle; "but if you've seen them so often, of course you know what they're like."

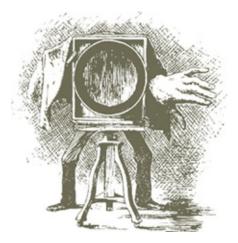
"I believe so," Alice replied thoughtfully. "They have their tails in their mouths—and they're all over crumbs."

"You're wrong about the crumbs," said the Mock Turtle: "crumbs would all wash off in the sea. But they have their tails in their mouths; and the reason is—" here the Mock Turtle yawned and shut his eyes. "Tell her about the reason and all that," he said to the Gryphon.

"The reason is," said the Gryphon, "that they would go with the lobsters to the dance. So they got thrown out to sea. So they had to fall a long way. So they got their tails fast in their mouths. So they couldn't get them out again. That's all."

Dodgson moved like a shuttlecock between Oxford and London, attending the theatre, galleries, public lectures, symphonies, a public autopsy, photographic exhibitions, the Royal Academy, the Royal Botanic Gardens, the Ashmolean Institute, concert halls, choral societies, glee clubs, piano recitals, dances, horticultural shows, fireworks displays, debates at the House of Commons, cricket at Lord's, tennis at Wimbledon, Oxford-Cambridge boat races, exhibitions of Egyptian and Greek antiquities, plays at the Adelphi and the Savoy, blackface minstrel shows and Covent Garden operas.

In the year of the Great Exhibition, the wet-plate collodion process of photography was invented, and it rapidly replaced the daguerreotype process. However, copyright issues meant it did not become available to amateurs until 1854. The following year, Dodgson was introduced to photography by fellow student Reginald Southey, the nephew of the former poet laureate Robert Southey.



Hiawatha's Photographing: Illustration for Carroll's poem by Arthur B. Frost.



Prince Leopold: This future beau of Alice was photographed by Dodgson at Oxford.

The young Dodgson immediately found photography the perfect vehicle for his lionizing. Very much a new art—the word *photography* (from the Greek for "light-drawing") had been coined only in 1839—it provided the lower-middle-class Dodgson with, as Cohen states: "a magic wand: it broke down social barriers and gave him access to many celebrities."

Dodgson and Southey were first admitted to the Deanery garden soon after the Liddells had moved to Oxford. The two men had been allowed to set up Southey's camera in the garden to photograph the cathedral. No pictures resulted, thanks to poor chemicals and the two men's inexperience, but there was another momentous outcome: Dodgson met Alice and her sisters.

Dodgson was genuinely fond of children, but it was chiefly through

offering to photograph the children of canons and deans of the colleges—and later to photograph the canons and deans themselves—that he was able to mingle with a level of society that would not otherwise welcome him. As Morton Cohen observes, "the newfangled art form became much more than a personal indulgence—it was a passport to the rarefied world of art, enabling him to sign photographs that he gave away as 'from the Artist.'"

"Thank you," said Alice, "it's very interesting. I never knew so much about a whiting before."

"I can tell you more than that, if you like," said the Gryphon. "Do you know why it's called a whiting?"

"I never thought about it," said Alice. "Why?"

"It does the boots and shoes," the Gryphon replied very solemnly.

Alice was thoroughly puzzled. "Does the boots and shoes!" she repeated in a wondering tone.

"Why, what are *your* shoes done with?" said the Gryphon. "I mean, what makes them so shiny?"

Alice looked down at them, and considered a little before she gave her answer. "They're done with blacking, I believe."

"Boots and shoes under the sea," the Gryphon went on in a deep voice, "are done with a whiting. Now you know."

"And what are they made of?" Alice asked in a tone of great curiosity.

"Soles and eels, of course," the Gryphon replied rather impatiently: "any shrimp could have told you that."

Dodgson worked hard at cultivating contacts with men and women of influence and power. He took thousands of photographs and wrote at least ten thousand letters in efforts to gain access to what he called his photographic "victims."

His rather obsessive-compulsive nature was a perfect fit for this complex and difficult form of early photography. Dodgson was truly a pioneer of the art, and purchased his own camera on March 18, 1856, during the Easter vacation. It arrived in Oxford on May Day, and a week

later a shipment of chemicals followed. "I am now ready to begin the art," he wrote.



Arthur Hughes and his daughter



Tom Taylor



Michael Faraday

During the Queen's visit to Christ Church in 1860, Dodgson reported his sighting of her and the royal entourage in the Deanery's dining hall. Later, he explained in a strongly boastful letter to one of his sisters something of his elaborate (and somewhat embarrassing) gate-crashing scheme to meet and photograph a reluctant Prince of Wales: "You will be sorry to hear that I have failed, finally and completely, in getting H.R.H. to sit for his photograph. I will give you the history of my proceedings in the matter, which will show you that I did not fail for want of asking, and that, if ever impudence and importunity deserved to succeed, *I* did."

In the winter of 1857, the dean and his wife travelled abroad, and without permission—and to Mrs. Liddell's displeasure when she found out—Carroll moved his photographic equipment into the Deanery so he might more easily entice a variety of the more famous Oxford academics and their children to be photographed.

"If I'd been the whiting," said Alice, whose thoughts were still running on the song, "I'd have said to the porpoise, '"Keep back, please: we don't want you with us!'"

"They were obliged to have him with them," the Mock Turtle said. "No wise fish would go anywhere without a porpoise."

"Wouldn't it really?" said Alice in a tone of great surprise.

"Of course not," said the Mock Turtle. "Why, if a fish came to me, and told me he was going a journey, I should say 'With what

porpoise?"

"Don't you mean 'purpose'?" said Alice.

"I mean what I say," the Mock Turtle replied in an offended tone. And the Gryphon added "Come, let's hear some of *your* adventures."

"I could tell you my adventures—beginning from this morning," said Alice a little timidly; "but it's no use going back to yesterday, because I was a different person then."

Around the same time, Dodgson took advantage of his father's connections to set up his equipment in Lambeth Palace, official London residence of the Archbishop of Canterbury, and there he photographed scores of bishops, archdeacons, politicians and military men. In 1859, using the same modus operandi, Dodgson descended on the London studio of sculptor Alexander Munro—whom he'd met in Oxford the year before—and from there spring boarded to the home of Munro's friend the dramatist (and later *Punch* editor) Tom Taylor, who provided introductions to theatrical celebrities and John Tenniel, future illustrator of the Alice books.

Though he failed to "victimize" Darwin, he made good use of the opportunity presented by what became known as the Great Debate at the Oxford University Museum of Natural History in 1860 and photographed Thomas Huxley, Samuel Wilberforce, Richard Owen, Edward Pusey, Charles Kingsley, Michael Faraday and nearly every other well-known participant and guest.

And the list goes on—artist William Holman Hunt and family; and through him John Everett Millais and his wife, Effie Gray, the former Mrs. John Ruskin, and their children; and on to the poet-painter Dante Gabriel Rossetti's house and his circle. Ellen Terry, the most famous child actor of the day, and through her some of the greatest figures in the theatre at the time, including Henry Irving, Charles Kean, William Gilbert and Arthur Sullivan.

"Explain all that," said the Mock Turtle.

"No, no! The adventures first," said the Gryphon in an impatient tone: "explanations take such a dreadful time."

So Alice began telling them her adventures from the time when

she first saw the White Rabbit. She was a little nervous about it just at first, the two creatures got so close to her, one on each side, and opened their eyes and mouths so very wide; but she gained courage as she went on. Her listeners were perfectly quiet till she got to the part about her repeating "You are old, Father William," to the Caterpillar, and the words all coming different, and then the Mock Turtle drew a long breath, and said "That's very curious!"

"It's all about as curious as it can be," said the Gryphon.

"It all came different!" the Mock Turtle repeated thoughtfully. "I should like to hear her try and repeat something now. Tell her to begin." He looked at the Gryphon as if he thought it had some kind of authority over Alice.

"Stand up and repeat 'Tis the voice of the sluggard,' " said the Gryphon.

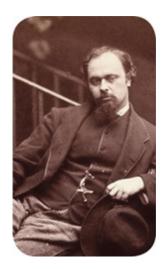
Nothing in Dodgson's long list of lion-hunting campaigns, however, could quite compare to the elaborate planning and persistence that went into his stalking of that greatest literary lion of his time, the poet laureate Alfred, Lord Tennyson. And perhaps nothing is more revealing of contradictory aspects of Charles Dodgson's character and ambitions that would inevitably place him on a collision course with the socially superior parents of Alice Liddell, and to some degree supplies us with possible psychological motives for the author's transformation of the original *Under Ground* manuscript into the more complex and aggressively satirical *Wonderland*.



William Holman Hunt



Ellen Terry



Dante Gabriel Rossetti

In August of 1857, Dodgson met Mrs. C. R. Weld, who he discovered was the sister-in-law of Emily Weld, wife of Alfred Tennyson. Dodgson moved quickly to impress Mrs. Weld with his portraits of the Liddells and other prominent figures. He then enthused over her daughter, Agnes Grace, although Dodgson privately wrote: "[Tennyson] has addressed one sonnet to the little Agnes Grace: she hardly merits one by actual beauty." However, by dressing her up in a costume of Red Riding Hood, he created a memorable image. He then sent "a print of her, through Mrs. Weld, for Tennyson's acceptance."

"How the creatures order one about, and make one repeat lessons!" thought Alice. "I might as well be at school at once." However, she got up, and began to repeat it, but her head was so full of the lobster Quadrille, that she hardly knew what she was saying, and the words came very queer indeed:—

"'Tis the voice of the lobster: I heard him declare, 'You have baked me too brown, I must sugar my hair.' As a duck with its eyelids, so he with his nose Trims his belt and his buttons, and turns out his toes. When the sands are all dry, he is gay as a lark, And will talk in contemptuous tones of the Shark: But, when the tide rises and sharks are around, His voice has a timid and tremulous sound."

"That's different from what I used to say when I was a child," said the Gryphon.

"Well, I never heard it before," said the Mock Turtle; "but it sounds uncommon nonsense."

Alice said nothing: she had sat down with her face in her hands, wondering if anything would ever happen in a natural way again.



Tennyson by Ape: The great literary lion was stalked.

Upon hearing of Tennyson's acceptance of the photograph, Dodgson

packed up his camera and darkroom equipment and made straight for the Lake District. Through Mrs. Weld, Dodgson discovered the Tennyson family was staying at Tent Lodge near Coniston Water. Without warning Dodgson appeared at the door and presented his card on which he wrote: "the Artist of Agnes Grey as Little Red Riding Hood."

Tennyson was not at home, and Dodgson was greeted by Mrs. Tennyson and her two sons. On the pretence that he just happened to be in the area on holiday, Dodgson moved into a nearby hotel and waited for four days before calling again. Knowing that the reclusive Tennyson would refuse to sit himself, Dodgson asked Mrs. Tennyson for her permission to photograph the two boys.

This effort finally gave him the opportunity to meet the poet laureate. A few days later, he called again with his camera, black tent and bottles of chemicals, and photographed first the two boys, then the mother, then the entire family and finally—the true target—the poet laureate himself.



Tennyson by Dodgson: Their relationship became increasingly strained.

The following year, Dodgson discovered that the Tennysons had shifted the location of their rural retreat southward to Farringford, on the Isle of Wight. In a letter to a cousin, Dodgson unconvincingly claims that his brother "Wilfred must have basely misrepresented me if he said I followed the Laureate down to his retreat." Dodgson convinced no one, even in his immediate family, that it was "entirely coincidental" that he happened to visit the Isle of Wight for the first time in his life to discover Tennyson was also on the island.

Dodgson did acknowledge, once he had made this discovery: "Being there, I had the inalienable right of a freeborn Briton to make a morning call." So once again he appeared unannounced on their doorstep, and this time caught the laureate out in the open, mowing his lawn. By another remarkable coincidence, Dodgson discovered he had brought along a few extra prints of the Tennyson family that he thought the laureate might wish to see. The poet politely explained that his wife was ill and could not be disturbed; perhaps another time.

"I should like to have it explained," said the Mock Turtle.

"She can't explain it," said the Gryphon hastily. "Go on with the next verse."

"But about his toes?" the Mock Turtle persisted. "How *could* he turn them out with his nose, you know?"

"It's the first position in dancing." Alice said; but was dreadfully puzzled by the whole thing, and longed to change the subject.

"Go on with the next verse," the Gryphon repeated impatiently: "it begins 'I passed by his garden.'

Alice did not dare to disobey, though she felt sure it would all come wrong, and she went on in a trembling voice:—

"I passed by his garden, and marked, with one eye,
How the Owl and the Panther were sharing a pie:
The Panther took pie-crust, and gravy, and meat,
While the Owl had the dish as its share of the treat.
When the pie was all finished, the Owl, as a boon,
Was kindly permitted to pocket the spoon:
While the Panther received knife and fork with a growl,
And concluded the banquet—"

Tennyson had no idea how tenacious Dodgson could be. Dodgson simply camped out in nearby Freshwater and began to carry on a correspondence with Tennyson's son Hallam, sending him amusing stories and the gift of a pocket knife, while awaiting an invitation to dinner. Eventually, Dodgson wore Tennyson down and persuaded him to sit for another portrait. On each visit, Dodgson worshipfully recorded all events and conversations with the poet.

The relationship became increasingly strained. Dodgson sold to a stationer for public resale portrait photographs that the poet had expressly asked to be destroyed. He also had his sisters compile and publish an index to the poet's work for commercial sale, and he pestered Tennyson for requests of poems for an Oxford magazine he was editing. Finally, Dodgson wrote to Tennyson to say he had acquired a manuscript of an unpublished poem that the poet had suppressed and asked if he might keep it and show it to a few friends.

When Mrs. Tennyson wrote him a letter of rebuke over the unpublished poem, Dodgson, instead of retreating and at least feigning an apology, entered into an increasingly heated exchange, indignantly defending his sense of honour and proper etiquette. The exchange ended when Dodgson implied that Tennyson himself was no gentleman.

Nothing enraged Dodgson more than an implication of dishonourable or ungentlemanly conduct. On the Isle of Wight, Dodgson had entered into the circle of Tennyson's neighbour Julia Margaret Cameron, among the best-known early Victorian photographers. But in falling out with Tennyson, Dodgson soon ceased to visit the island altogether and eventually chose Eastbourne as his summer residence.

"What *is* the use of repeating all that stuff," the Mock Turtle interrupted, "if you don't explain it as you go on? It's by far the most confusing thing I ever heard!"

"Yes, I think you'd better leave off," said the Gryphon, and Alice was only too glad to do so.

"Shall we try another figure of the lobster Quadrille?" the Gryphon went on. "Or would you like the Mock Turtle to sing you a song?"

"Oh, a song, please, if the Mock Turtle would be so kind," Alice replied, so eagerly that the Gryphon said, in a rather offended tone, "Hm! No accounting for tastes! Sing her 'Turtle Soup,' will you, old fellow?"

The Mock Turtle sighed deeply, and began, in a voice sometimes choked with sobs, to sing this:—

"Beautiful Soup, so rich and green, Waiting in a hot tureen! Who for such dainties would not stoop? Soup of the evening, beautiful Soup!
Soup of the evening, beautiful Soup!
Beau—ootiful Soo—oop!
Beau—ootiful Soo—oop!
Soo—oop of the e—e—evening,
Beautiful, beautiful Soup!

Although Tennyson does not appear in *Wonderland*, many have speculated that he is the White Knight in *Looking-Glass*. After all, as some would cleverly observe, Alfred Lord Tennyson was certainly the most famous "Isle of Wight Knight."

Dodgson became a gifted photographer, though it would appear he took up the pastime as a means to an end. Once he became sufficiently famous to gain entry into high society without resorting to photography, Dodgson promptly gave it up. By 1880, he had ceased taking photographs entirely—evidently without any sense of loss or regret.

Just as remarkably, when Dodgson gained celebrity status as Lewis Carroll, he became indignant at the audacity of anyone who dared to address him without a formal and socially appropriate introduction. It seems he no longer believed in "the inalienable right of a freeborn Briton to make a morning call" (as he had written in an 1859 letter). Anyone with the temerity to ask after Mr. Lewis Carroll at the college gate was summarily ordered off the grounds by the porter. Mail addressed to Lewis Carroll at Christ Church, Oxford, was returned stamped "Unknown."

THE STRANGER CIRCULAR It was not just letters sent to Christ Church addressed to Lewis Carroll that were summarily dealt with. Any letters addressed to the Reverend Charles Dodgson from anyone who Dodgson did not know—or had not been formally introduced to—would receive the following notice of disavowal printed up as a leaflet by the Oxford printer Shepherd in 1890: "Mr. Dodgson is so frequently addressed by strangers on the quite unauthorized assumption that he claims, or at any rate acknowledges the authorship of books not published under his name, that he has

found it necessary to print this, once and for all, as an answer to all such applications. He neither claims nor acknowledges any connection with any pseudonym, or with any book that is not published under his own name. Having therefore no claim to retain, or even read the enclosed, he returns it for the convenience of the writer who has misaddressed it."

"Beautiful Soup! Who cares for fish,
Game, or any other dish?
Who would not give all else for two
Pennyworth only of beautiful Soup?
Pennyworth only of beautiful Soup?
Beau—ootiful Soo—oop!
Beau—ootiful Soo—oop!
Soo—oop of the e—e—evening,
Beautiful, beauti—FUL SOUP!"

"Chorus again!" cried the Gryphon, and the Mock Turtle had just begun to repeat it, when a cry of "The trial's beginning!" was heard in the distance.

"Come on!" cried the Gryphon, and, taking Alice by the hand, it hurried off, without waiting for the end of the song.

"What trial is it?" Alice panted as she ran; but the Gryphon only answered "Come on!" and ran the faster, while more and more faintly came, carried on the breeze that followed them, the melancholy words:—

"Soo—oop of the e—e—evening, Beautiful, beautiful Soup!"

Chapter 11: Who Stole the Tarts?

"It began with the tea."





TRIAL OF THE HEART Alice's last stop in Wonderland is in the King of Hearts' court of justice. A trial is about to begin as the Gryphon leads Alice into the courtroom. It concerns a crime committed by the Knave of Hearts in a traditional nursery rhyme entitled "The Queen of Hearts." This rhyme first appeared in print in the *European Magazine* in 1782. However, Carroll was probably most familiar with the wonderfully illustrated and annotated version published by Charles Lamb in 1805 as *The King and Queen of Hearts: showing how notably the Queen made her Tarts, and how Scurvily the Knave stole them away, with other particulars belonging thereunto.*

In *Wonderland*, the trial over this same alleged crime of stealing some tarts is held in the royal court, where "the King and Queen of Hearts were seated on their throne" and "the judge ... was the King." The royal couple's herald, the White Rabbit, appears to be in charge of courtroom protocol and keeps a close eye on events while Alice, jurors and witnesses are brought into the courtroom.

WHO STOLE THE TARTS?

The King and Queen of Hearts were seated on their throne when they arrived, with a great crowd assembled about them—all sorts of little birds and beasts, as well as the whole pack of cards: the Knave was standing before them, in chains, with a soldier on each side to guard him; and near the King was the White Rabbit, with a trumpet in one hand, and a scroll of parchment in the other. In the very middle of the court was a table, with a large dish of tarts upon it: they looked so good, that it made Alice quite hungry to look at them—"I wish they'd get the trial done," she thought, "and hand round the refreshments!" But there seemed to be no chance of this, so she began looking at everything about her, to pass away the time.

Alice had never been in a court of justice before, but she had read about them in books, and she was quite pleased to find that she knew the name of nearly everything there. "That's the judge," she said to herself, "because of his great wig."

In classical Greek mythology and literature, this scene is reminiscent of the tableau portrayed in Greco-Roman art of the King and Queen of Hades seated on their thrones. In this underground court of justice, the King is the judge, and he and his Queen are attended by their herald, the god Hermes (or Roman Mercury), who directs the proceedings as souls are brought before the royal couple. A similar subterranean court of justice was portrayed in Egyptian mythology and in the underworld kingdoms of many other civilizations. Alice, then, is witnessing a confusing and comical version of a trial of the soul.

The judge, by the way, was the King; and, as he wore his crown over the wig (look at the frontispiece if you want to see how he did it), he did not look at all comfortable, and it was certainly not becoming.

"And that's the jury-box," thought Alice, "and those twelve creatures," (she was obliged to say "creatures," you see, because some of them were animals, and some were birds,) "I suppose they are the jurors." She said this last word two or three times over to herself, being rather proud of it: for she thought, and rightly too, that very few little girls of her age knew the meaning of it at all. However, "jury-men" would have done just as well.

The twelve jurors were all writing very busily on slates. "What are they doing?" Alice whispered to the Gryphon. "They can't have anything to put down yet, before the trial's begun."

"They're putting down their names," the Gryphon whispered in reply, "for fear they should forget them before the end of the trial."



Soul on trial: Hermes in the court of the King and Queen of Hades.

In Greek mythology, a number of tales record a descent into the underworld culminating in a pleading for the return of a lost soul before the throne of Hades as King and judge of the dead. The theme of love conquering death was a popular one, especially when focused on romantic love, as in the legends of Eros and Psyche, Aphrodite and Adonis, and Orpheus and Eurydice.

"Stupid things!" Alice began in a loud, indignant voice, but she stopped hastily, for the White Rabbit cried out, "Silence in the court!" and the King put on his spectacles and looked anxiously round, to make out who was talking.

Alice could see, as well as if she were looking over their shoulders, that all the jurors were writing down "Stupid things!" on their slates, and she could even make out that one of them didn't know how to spell "stupid," and that he had to ask his neighbour to tell him. "A nice muddle their slates'll be in before the trial's over!" thought Alice.

One of the jurors had a pencil that squeaked. This of course, Alice could not stand, and she went round the court and got behind him, and very soon found an opportunity of taking it away. She did it so quickly that the poor little juror (it was Bill, the Lizard) could not make out at all what had become of it; so, after hunting all about

for it, he was obliged to write with one finger for the rest of the day; and this was of very little use, as it left no mark on the slate.

But Hades has also released souls for the sake of other forms of love: Dionysus won the release of his mother, Semele; Demeter won the (conditional) release of her sister-daughter, Persephone. In Wonderland's underground court, Alice recognizes the judge "because of his great wig." Then we are informed: "The judge, by the way, was the King, and he wore his crown over the wig ... he did not look at all comfortable, and it was certainly not becoming."



Love conquers death: Orpheus in the Underworld Reclaiming Eurydice, by Jean Restout, 1763.



The Chapter House: Where Dean Liddell was a towering presence.

The Oxford equivalent of Wonderland's court of justice was the college's Chapter House, where all decisions concerning Christ Church's business were resolved. Like the King of Hearts, Dean Henry Liddell presided over the Chapter House with an air of authority that assumed the dual role of judge and king. Certainly, this was how the dean's critics viewed his manner of running the affairs of the college. As the German philologist and Orientalist Friedrich Max Müller observed, "In the

University there were those who could not bear his towering high above them as he did, not in stature only, but in character and position."

"Herald, read the accusation!" said the King.

On this the White Rabbit blew three blasts on the trumpet, and then unrolled the parchment scroll, and read as follows:—

"The Queen of Hearts, she made some tarts,
All on a summer day:
The Knave of Hearts, he stole those tarts,
And took them quite away!"

"Consider your verdict," the King said to the jury.

"Not yet, not yet!" the Rabbit hastily interrupted. "There's a great deal to come before that!"

"Call the first witness," said the King; and the White Rabbit blew three blasts on the trumpet, and called out, "First witness!"



Door to Chapter House: Recognisable in Looking-Glass.

At the same time Carroll was adding the courtroom chapters to his manuscript for *Wonderland*, he wrote a squib titled "The Majesty of Justice," which concludes:

That makes the silliest men Seem wise; the meanest men look big:

The Majesty of Justice, then, Is seated in the WIG.

The "WIG" punningly implies that this court is unjust because the judge is a Whig (that is, Liberal), just like Dean Liddell of Christ Church.

The real-life identity of the Knave of Hearts—whose trial at the climax of *Wonderland* insults Alice's natural sense of justice so badly that she violently rejects the laws of Wonderland—has always been a puzzle.



Flirtatious Knave: As drawn by Carroll himself.

The first witness was the Hatter. He came in with a teacup in one hand and a piece of bread-and-butter in the other. "I beg pardon, your Majesty," he began, "for bringing these in; but I hadn't quite finished my tea when I was sent for."

"You ought to have finished," said the King. "When did you begin?"

The Hatter looked at the March Hare, who had followed him into the court, arm-in-arm with the Dormouse. "Fourteenth of March, I think it was," he said.

"Fifteenth," said the March Hare.

"Sixteenth," added the Dormouse.

"Write that down," the King said to the jury, and the jury eagerly wrote down all three dates on their slates, and then added them up, and reduced the answer to shillings and pence.

It does appear that the Knave was something of a flirt. Carroll portrays his crime both as the theft of baked goods and as the stealing of the affections of a young girl: *tart* in Victorian times meaning sweetheart or young maiden (and not, as in later usage, a prostitute). In the original *Alice's Adventures Under Ground*, a drawing by Carroll shows the Knave of Hearts kissing one of the maids. So, despite the Knave's protestations, one must suppose he was guilty of at least one form of theft.

"Take off your hat," the King said to the Hatter.

"It isn't mine," said the Hatter.

"Stolen!" the King exclaimed, turning to the jury, who instantly made a memorandum of the fact.

"I keep them to sell," the Hatter added as an explanation: "I've none of my own. I'm a hatter."

Here the Queen put on her spectacles, and began staring at the Hatter, who turned pale and fidgeted.

"Give your evidence," said the King; "and don't be nervous, or I'll have you executed on the spot."

This did not seem to encourage the witness at all: he kept shifting from one foot to the other, looking uneasily at the Queen, and in his confusion he bit a large piece out of his teacup instead of the breadand-butter.

Just at this moment Alice felt a very curious sensation, which puzzled her a good deal until she made out what it was: she was beginning to grow larger again, and she thought at first she would get up and leave the court; but on second thoughts she decided to remain where she was as long as there was room for her.

In the original manuscript, completed in the first months of 1863, the trial is over almost before it begins. The White Rabbit reads the offence in the form of the nursery rhyme about the Knave of Hearts stealing the tarts. Although the guilt of the Knave is assumed, the King insists on proper procedure, and an argument ensues. It ends before the bottom of the page.

In the final version, published two years later, the one page of the trial has grown to over twelve. There are the testimonies of several witnesses,

an entire chapter entitled "Alice's Evidence," and a number of increasingly outrageous and unjust rulings before Alice shouts "Stuff and nonsense!"—and everything collapses like a house of cards.

Why such outrage? Why does Carroll have Alice involved in such a protracted trial? What injustice has really been committed? And what happened in the two years between the writing of *Alice's Adventures Under Ground* in early 1863 and the publication of *Alice's Adventures in Wonderland* in 1865?

"I wish you wouldn't squeeze so," said the Dormouse, who was sitting next to her. "I can hardly breathe."

"I can't help it," said Alice very meekly: "I'm growing."

"You've no right to grow here," said the Dormouse.

"Don't talk nonsense," said Alice more boldly: "you know you're growing too."

"Yes, but *I* grow at a reasonable pace," said the Dormouse: "not in that ridiculous fashion." And he got up very sulkily and crossed over to the other side of the court.

All this time the Queen had never left off staring at the Hatter, and, just as the Dormouse crossed the court, she said to one of the officers of the court, "Bring me the list of the singers in the last concert!" on which the wretched Hatter trembled so, that he shook both his shoes off.



The weighing of the heart: The scene most often depicted in Egyptian art.

The trial of the Knave of Hearts is a curious thing, for Alice appears to be the only defender of the Knave and finally causes the whole court to collapse. A mythological precursor to the Knave of Hearts would most likely be Triptolemus, the young hero who received the secret of agriculture from Persephone.

Once rescued by Persephone from the underworld, Triptolemus ascends to the world of the living as the god of sowing and planting. As the only figure in the *Under Ground* version of the fairy tale portrayed with even vaguely romantic intentions—kissing one of the tarts (maidens)—the Knave might best fit the role of the god of sowing and planting.

"Give your evidence," the King repeated angrily, "or I'll have you executed, whether you're nervous or not."

"I'm a poor man, your Majesty," the Hatter began, in a trembling voice, "—and I hadn't begun my tea—not above a week or so—and what with the bread-and-butter getting so thin—and the twinkling of the tea—"

"The twinkling of the what?" said the King.

"It began with the tea," the Hatter replied.

"Of course twinkling *begins* with a T!" said the King sharply. "Do you take me for a dunce? Go on!"

"I'm a poor man," the Hatter went on, "and most things twinkled after that—only the March Hare said—"

"I didn't!" the March Hare interrupted in a great hurry.

"You did!" said the Hatter.

"I deny it!" said the March Hare.

"He denies it," said the King: "leave out that part."

However, it is not until the real-life Oxford identity of the Knave of Hearts is revealed that the nature—and savagery—of the intended satire becomes vividly clear.

For the Knave is the author, LEWIS CARROLL himself, and the trial is based on a trial of the heart that left Carroll feeling unjustly convicted. It was a pivotal moment in Carroll's life, and one about which he became forever embittered.

"Well, at any rate, the Dormouse said—" the Hatter went on, looking anxiously round to see if he would deny it too; but the Dormouse denied nothing, being fast asleep.

"After that," continued the Hatter, "I cut some more bread-and-butter—"

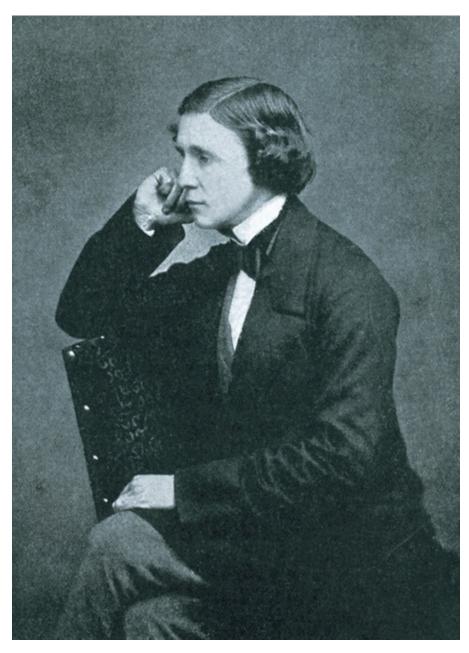
"But what did the Dormouse say?" one of the jury asked.

"That I can't remember," said the Hatter.

"You *must* remember," remarked the King, "or I'll have you executed."

The miserable Hatter dropped his teacup and bread-and-butter, and went down on one knee. "I'm a poor man, your Majesty," he began.

"You're a very poor speaker," said the King.



Carroll: Felt unjustly convicted.

For all his sincere intent to give Alice—and all children—(in his own words) "a gift of love" in this beautiful, intricately wrought fairy tale, the book had other agendas. One of them made it a poisoned apple offered up to a few unsuspecting adults. *Alice's Adventures in Wonderland* is written on many levels, and the darkest of these is the waging of a vengeful feud with Alice Liddell's parents—the real-life King and Queen of Hearts.

In every account of Charles Dodgson's life, biographers are left to

puzzle over the sudden and complete breakdown of the relationship between Dodgson and the Liddell family. From 1857 to 1863, Dodgson spent much of his free time at Christ Church, away from academic work and in the company of the Liddell children. Except for the long summer holiday break, a week seldom went by without Carroll enjoying walks, picnics or boat rides with them.

Here one of the guinea-pigs cheered, and was immediately suppressed by the officers of the court. (As that is rather a hard word, I will just explain to you how it was done. They had a large canvas bag, which tied up at the mouth with strings: into this they slipped the guinea-pig, head first, and then sat upon it.)

"I'm glad I've seen that done," thought Alice. "I've so often read in the newspapers, at the end of trials, 'There was some attempt at applause, which was immediately suppressed by the officers of the court,' and I never understood what it meant till now."

"If that's all you know about it, you may stand down," continued the King.

"I can't go no lower," said the Hatter: "I'm on the floor, as it is." "Then you may *sit* down," the King replied.

Here the other guinea-pig cheered, and was suppressed.

On June 25, 1863—almost a year after the boat trip that inspired the book—Dodgson and a party of ten, including the dean and Mrs. Liddell with their daughters and several others, went on a cheerful boating expedition to Nuneham. The adults returned home separately, while Dodgson, unchaperoned, returned the three girls himself by train and carriage. He marked the event in his diary as one of his most joyful days with the children. It was to prove to be the last.

Two days later, on Saturday, June 27, Dodgson begins his diary: "Wrote to Mrs. Liddell urging her either"—the word *either* is crossed out —"to send the children to be photographed." The children were not sent. Instead, Dodgson was summoned to the Deanery.

The entries for the rest of that day and all of Sunday and Monday are missing: they were cut out. By the next entry, Tuesday, June 30, it was all over. Dodgson tersely reports that the Liddells had left Oxford for

their summer home in Wales: "The Deanery party left for Llandudno." Pointedly, there are no farewell notes or fond goodbyes as there had been on other occasions.

"Come, that finished the guinea-pigs!" thought Alice. "Now we shall get on better."

"I'd rather finish my tea," said the Hatter, with an anxious look at the Queen, who was reading the list of singers.

"You may go," said the King, and the Hatter hurriedly left the court, without even waiting to put his shoes on.

"—and just take his head off outside," the Queen added to one of the officers; but the Hatter was out of sight before the officer could get to the door.

"Call the next witness!" said the King.

The next witness was the Duchess's cook. She carried the pepperbox in her hand, and Alice guessed who it was, even before she got into the court, by the way the people near the door began sneezing all at once.

"Give your evidence," said the King.

"Shan't," said the cook.

After noting the children's movements almost daily so far, Dodgson mentions the Liddells only twice over the rest of the year. In one of those entries, on December 5, he reports seeing them at a distance: "But I held aloof from them, as I have done all this term." Although he had finished writing *Alice's Adventures Under Ground* before this incident in June, Dodgson did not complete illustrating (with his own drawings) and binding the handwritten manuscript until November, when it was sent as a gift to the Deanery.

No note of thanks or acknowledgement was forthcoming from the Deanery, neither for the single handmade copy of the story nor for the first published copy of *Alice's Adventures in Wonderland* sent two years later, for Christmas 1865. The breakdown in relations was permanent. Dodgson had been exiled. Except for occasional—and usually painful—formal encounters, Charles Dodgson was banned from the Deanery and the company of Alice and her sisters.

What is known is that Dodgson was summoned before Alice's parents just after the June 25 outing. In that encounter with the dean and Mrs. Liddell, a decision was made that it would be inappropriate for the Oxford mathematics don to have any further sustained contact with Alice or her sisters.

The King looked anxiously at the White Rabbit, who said in a low voice, "Your Majesty must cross-examine *this* witness."

"Well, if I must, I must," the King said, with a melancholy air, and, after folding his arms and frowning at the cook till his eyes were nearly out of sight, he said in a deep voice, "What are tarts made of?"

"Pepper, mostly," said the cook.

"Treacle," said a sleepy voice behind her.

"Collar that Dormouse," the Queen shrieked out. "Behead that Dormouse! Turn that Dormouse out of court! Suppress him! Pinch him! Off with his whiskers!"

For some minutes the whole court was in confusion, getting the Dormouse turned out, and, by the time they had settled down again, the cook had disappeared.

"Never mind!" said the King, with an air of great relief. "Call the next witness." And he added in an undertone to the Queen, "Really, my dear, you must cross-examine the next witness. It quite makes my forehead ache!"

Alice watched the White Rabbit as he fumbled over the list, feeling very curious to see what the next witness would be like, "— for they haven't got much evidence *yet*," she said to herself. Imagine her surprise, when the White Rabbit read out, at the top of his shrill little voice, the name "Alice!"

Obviously, something occurred on or after the outing that provoked this sudden break—something sufficiently dramatic for one of Dodgson's nieces to find it necessary to cut several pages from his normally emotionally reticent diaries. There have been many speculations on this issue. Although a number of theories abound, the most common hold that something inappropriate occurred during the journey home, or that

at the Deanery meeting, Dodgson made a proposal of engagement to Alice that was rudely rebuffed.

Enough is known about Dodgson's temperament to understand that—true or not—he would have reacted angrily to any suggestion of improper conduct. As demonstrated by his many feuds, Dodgson was incapable of letting any slight on his moral integrity or personal honour pass without taking grave offence.

EGYPTIAN HOUSE OF CARDS The theosophists of the fourth century AD in Alexandria were strongly influenced by the Egyptian Mysteries. These Egyptian rites were revived by the Freemasons, who wished to trace their origins to history's first architect, Imhotep, the builder of the Step Pyramid. Consequently, Egyptian motifs—especially those relating to the gods Isis and Osiris—are to be found embedded by Carroll in *Wonderland* from the opening prelude poem right through to its culmination with the trial of the Knave of Hearts.

It is also noteworthy that Carroll was not only familiar with the British Museum Egyptian collection, but was a frequent visitor to the famous Egyptian Hall and Museum in Piccadilly, as were many artists and writers of the time. Besides displaying Egyptian antiquities, this establishment had exhibition halls for work by contemporary artists. It also became a meeting place for those—like Carroll—who were fascinated with the occult.

Isis, of course, is also the name of the branch of the Thames River upon which Lewis Carroll took the real-life Alice and her sisters on that fateful boating expedition. And just as Isis descends into the Egyptian underworld by way of a boat on the river Nile, so in the prelude poem Alice and her sisters descend into Wonderland by way of a boat on the River Isis.

In the Egyptian underworld, called the Duat, everything is a reverse of the living world. This matches Alice's anticipation as she falls down her rabbit-hole: she thinks she may end up in the "Antipathies" (instead of the antipodes). She is not entirely wrong, for everything and everybody she encounters is contrary to her expectations.

Many other aspects of Wonderland would be strangely familiar to the ancient Egyptians. Wonderland's underground hall with its many doors resembles the many doors to Egyptian underground halls where—like Alice—the wandering soul is interrogated before it may pass on toward its final trial in the Hall of Justice. The Egyptian doorkeepers with the heads of animals and the bodies of humans are eerily similar to the doorkeepers of the Duchess's kitchen: the Frog-headed and the Fish-headed Footmen. Then, too, there is the mysterious Cheshire Cat, the riddling Sphinx of Wonderland.

Also, closer examination of the Pool of Tears episode reveals that it is more than a joke about a child drowning in her own tears. As discussed earlier, "a great girl like you" makes perfect sense if we understand that Alice has taken on the identity of the great goddess Isis, whose tears are the source of the Nile. This convincingly explains how she could be carried away in the flood of her own tears and the rather sinister rhyme about a crocodile in "the waters of the Nile."

The Wonderland trial of the Knave of Hearts is strongly imitative of the trial of the soul and the weighing of the heart as famously portrayed in the Egyptian *Book of the Dead* and the Pyramid Texts.

In the Wonderland underworld, the trial takes place in the court of the royal house of "the King and Queen of Hearts ... seated on their throne." In this court the judge "was the King," and the royal herald and scribe directs proceedings and stands with "a scroll of parchment" in one hand. The trial is witnessed by a jury of animals and birds, and set before all is "a table, with a large dish of tarts upon it."

In the Egyptian underworld, the trial took place in the court of the royal House of Hearts, where the King and Queen of the Duat were seated on their thrones. In this court the judge was King Osiris, and the royal herald and scribe directed proceedings and stood with a scroll of parchment in one hand. The trial was witnessed by a jury of animal-headed and bird-headed gods. And set before all was a table with the cakes of immortality upon it—the promised reward at the end of the trial.

The procedure of the trial is clear in this "weighing of the heart" passage taken from the *Book of the Dead*: "May my heart be with me in the House of Hearts. May my heart be with me, and may it rest there, or I shall not eat of the cakes of Osiris ... nor shall I be able to sail down the Nile with thee."

The Weighing of the Heart is the most famous and most commonly reproduced scene in all Egyptian art. This was where the human soul, or spirit double of the deceased person (or one's "immaterial essence," as Carroll phrased it), descended into the underworld to be judged. There the heart was placed on the great scales of justice, where it was weighed against the feather of truth.

Alice's adventures culminate in the court of the house of hearts, where the judge-King of Hearts sits in judgment of the Knave of Hearts. Similarly, Isis's adventures culminate in this court wherein the judge-king Osiris sits in judgment of the human heart. As we'll see in the next chapter, it is significant that the judge-King of Hearts puts great stock in his all-important Rule Forty-two (which Alice rejects), because for the judge-king Osiris there were forty-two crimes that must be denied by each soul before judgment was delivered.

These forty-two so-called negative confessions are similar to the ten Hebrew and Christian Commandments. These declarations were personified by the forty-two Egyptian gods in the Duat, and were matched by the forty-two cards—Carroll carefully excluded the ten numbered spade gardeners—in Wonderland's procession.

Three of these declarations seem to relate directly to the trial of the Knave of Hearts who stole the tarts:

"I have not stolen the cakes of the gods.

"I have not stolen the cakes of the Child.

"I have not stolen the cakes offered to the Soul."

If the soul was innocent of all forty-two crimes, the weighed heart would be as light as the feather of truth, and the soul would be rewarded and nourished with the cakes of immortality and would be—as the theosophists claimed—"reborn to eternity." However, if the heart was heavy with guilt for violating any of the forty-two

rules, then oblivion was the person's fate and their heart was fed to the terrible monster Ammut, the Devourer of Hearts who stood by the scales of justice. On the theosophical level, it might reasonably be argued that the judge-King of Hearts is judge-king Osiris, and the heartless Queen of Hearts is Ammut, the monster of retribution.

Meanwhile, Alice, who has been accused of growing "a mile high," is once again that "great girl"—the goddess Isis—who stands as witness to Osiris's judgment. But, as the great goddess, she now is capable of overruling the judge-King and defends the Knave of Hearts. And in this Egyptian tableau, the Knave of Hearts is Horus. For just as the Knave of Hearts is the son of the King of Hearts, so the young god Horus is the son of the king Osiris.

Because Alice rejects Rule Forty-two, she also forfeits her right to the cakes of immortality and will have to return to the everyday world of her ordinary life. After all, she is a dreamer passing through this underworld, not yet ready for the real test awaiting her in the afterlife.

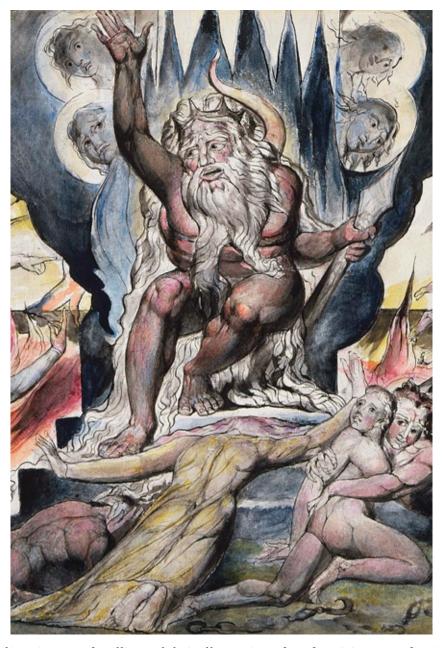


As seen by the Knave: Alice, Lorina and Edith Liddell.

Chapter 12: Alice's Evidence

"Oh, I've had such a curious dream!"





Minos presiding, in one of William Blake's illustrations for *The Divine Comedy*, circa 1824–7.

A HOUSE OF CARDS Wonderland's final chapter begins with Alice being called to provide evidence in the trial of the Knave of Hearts. Surprised at being called as a witness, Alice jumps up and—forgetting she has grown so large—"tip[s] over the jury-box with the edge of her skirt ... reminding her very much of a globe of goldfish she had accidentally upset a week before." The exactly worded account and the fact that "the accident of the goldfish kept running in her head" suggests that here Carroll is teasing Alice Liddell (possibly to the amusement of her sisters) by introducing a mildly embarrassing real-life accident with a fish bowl in the Deanery.

Of course, in Wonderland, this will not be the last time Alice literally upsets the court. It foreshadows much of what is to come, and the matter of her great size—physically and metaphorically—suggests her growing power and influence in Wonderland.

ALICE'S EVIDENCE.

"Here!" cried Alice, quite forgetting in the flurry of the moment how large she had grown in the last few minutes, and she jumped up in such a hurry that she tipped over the jury-box with the edge of her skirt, upsetting all the jurymen on to the heads of the crowd below, and there they lay sprawling about, reminding her very much of a globe of goldfish she had accidentally upset the week before.

"Oh, I beg your pardon!" she exclaimed in a tone of great dismay, and began picking them up again as quickly as she could, for the accident of the goldfish kept running in her head, and she had a vague sort of idea that they must be collected at once and put back into the jury-box, or they would die.

"The trial cannot proceed," said the King in a very grave voice, "until all the jurymen are back in their proper places—all," he repeated with great emphasis, looking hard at Alice as he said so.

In *Lewis Carroll: A Portrait with Background*, Donald Thomas draws a number of comparisons between Wonderland and the Greco-Roman

underworld kingdom of Hades. Thomas theorizes on the influence of Virgil when it comes to legal matters: "That Dodgson intended a parallel or was conscious of being influenced by his reading [of the *Aeneid*] is beyond proof. He certainly used figures from Virgil's account in *Euclid and his Modern Rivals* (1879), when two of the judges from the courts of Hades in the *Aeneid*, Minos and Rhadamanthus, act as mathematical examiners in a dream of contemporary Oxford."

Thomas finds particular evidence of Virgil in the courtroom scenes and procedures of Wonderland. "The Queen of Hearts would have been peculiarly at home in Virgil's underworld. Minos and Rhadamanthus preside over the courts of the dead, but hand over the guilty to Tisiphone, Queen of the Furies, for punishment. Virgil describes the procedure of the court of Rhadamanthus. 'Castigatque auditque dolos,' he chastises them and then listens to the account of their crimes."

THE LAWS OF THOUGHT

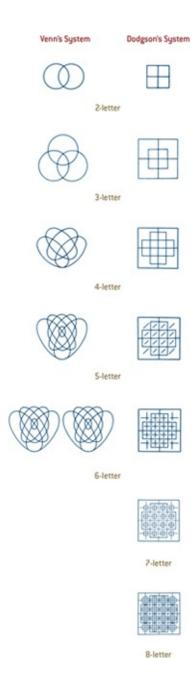
GEORGE BOOLE (1815–1864), a British mathematician, philosopher and logician, was the author of *An Investigation of the Laws of Thought, on Which Are Founded the Mathematical Theories of Logic and Probabilities*. The development of Boolean logic coincided exactly with Lewis Carroll's academic career and seems to have influenced every aspect of his intellectual and imaginative life. In a mathematician's Wonderland, George Boole would be the most obvious candidate for the King of Hearts.

Before the publication of Boole's first work on symbolic logic, *The Mathematical Analysis of Logic*, in 1847, logic had advanced little since Aristotle's time. However, in that work—and in his *Laws of Thought* in 1854—Boole showed for the first time how algebraic formulae could be used in logic to reveal (in his own words) "those universal laws of thought which are the basis of all reasoning" and "to give expression to them in the symbolic language of a Calculus." The early twentieth-century mathematician-philosopher Bertrand Russell believed it to be a major event in the history of mathematics: "Pure mathematics was discovered by Boole, in a work which he called *The Laws of Thought*."

A contemporary of Lewis Carroll's was John Venn (1834–1923), the Cambridge logician who created a simplified notation system of Boolean logic involving interlocking circles known as Venn diagrams. As a measure of Carroll's enthusiasm for Boolean algebra, he published what he believed was a better notation system, using interlocking squares.



George Boole: A major influence on mathematics and Carroll.



"Beyond six letters Mr. Venn does not go."

CHARLES DODGSON

Carroll's contemporary John Conington, the first professor of Latin at Oxford and editor of *The Works of Virgil* in three volumes, remarked that "this legal procedure of Rhadamanthus ... was 'hysteron proteron,' that is to say putting the second thing first." Thomas points out that this is the same procedure employed when "the Queen of Hearts insisted,

'Sentence first—verdict afterwards.' Dodgson's Wonderland and Virgil's underworld have strikingly similar judicial systems."

Dodgson knew Conington well, and in his alphabetical squib "Examination Statute" wrote: "C is for [Conington], constant to Horace." Thomas observes that Conington published his edition of Book vi of the *Aeneid*, with his comment on the justice of the underworld, "including this judicial dictum of the Queen of Hearts," a few years in advance of Dodgson's publication of *Wonderland*. He adds that perhaps not coincidentally, "another Oxford classicist, Arthur Sidgwick, a younger friend of Dodgson's, remarked that Virgil's was 'a famous line from its inversion of the natural order of justice.'"

Alice looked at the jury-box, and saw that, in her haste, she had put the Lizard in head downwards, and the poor little thing was waving its tail about in a melancholy way, being quite unable to move. She soon got it out again, and put it right; "not that it signifies much," she said to herself; "I should think it would be *quite* as much use in the trial one way up as the other."

As soon as the jury had a little recovered from the shock of being upset, and their slates and pencils had been found and handed back to them, they set to work very diligently to write out a history of the accident, all except the Lizard, who seemed too much overcome to do anything but sit with its mouth open, gazing up into the roof of the court.

"What do you know about this business?" the King said to Alice.

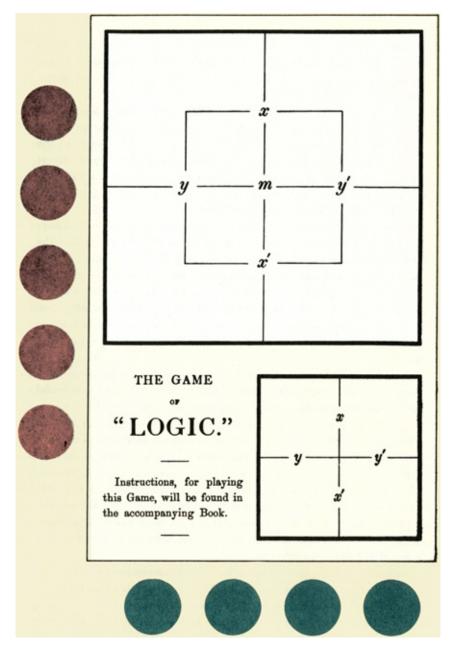
"Nothing," said Alice.

"Nothing whatever?" persisted the King.

However, the trial of the Knave of Hearts is clearly the product of the mind of Charles Dodgson the mathematician and logician. Dodgson's most extensive mathematical work was *Symbolic Logic*. It was dedicated "to the memory of Aristotle," the father of logic, and states its primary mission was to give its readers "the power to detect *fallacies*, and to tear to pieces flimsy illogical arguments." And although *Symbolic Logic* was not written for children, the teaching of logic to children was a hobby horse Dodgson rode for his entire life. He frequently gave talks at girls'

schools on this discipline. And two decades after *Wonderland*, he published *The Game of Logic*: rules for a board game for children played with a set of counters in which logic is expressed in terms of symbols, syllogisms and sorites.

The trial of the Knave has elements of a logical game played in accordance with certain rules or axioms and employing a specific formal language. The challenge for Alice is to discover the rules and the nature of the game. This is a difficult task, as the formalist's concerns are not with everyday truths but rather with formal proofs that may be totally independent of reality and meaning in terms of everyday language.

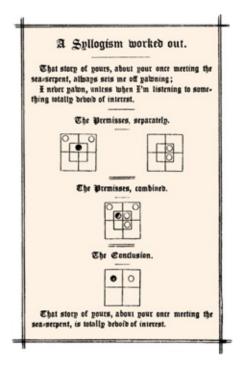


Game theory: The board and counters of Carroll's Logic.

Or, as Dodgson explains in the preface to his *The Game of Logic*: "It isn't of the slightest consequence to us, as Logicians, whether our Premises are true or false: all we have to make out is whether *they lead to the Conclusion*, so that if they were true, it would be true also." Why, we may ask, does Carroll set up this game in a courtroom as a trial? The answer is that Aristotelian logic had its origin in the education of lawyers and politicians with the practical aim of sorting out valid from

invalid arguments. Since Aristotle, logicians have tried to formulate rules that, when followed, will ensure that only true conclusions are drawn from true premises. These are called "the rules of true argument."

Although Dodgson had great respect for the classical tradition of Aristotelian logic, he did recognize its limits, and was much excited by the dramatic discovery of the algebraic formulation of logic by the British mathematician George Boole. This discovery of Boolean logic was made during Dodgson's student years and had a profound effect on his work throughout his life. He was much taken up with this application of algebraic notations and principles to ancient Aristotelian logical problems. In fact, his *Symbolic Logic* was a work almost entirely concerned with the application of algebra to logic.



The Game in action: In Carroll's Symbolic Logic.

"Nothing whatever," said Alice.

"That's very important," the King said, turning to the jury. They were just beginning to write this down on their slates, when the White Rabbit interrupted: "*Un*important, your Majesty means, of course," he said in a very respectful tone, but frowning and making faces at him as he spoke.

"*Un*important, of course, I meant," the King hastily said, and went on to himself in an undertone, "important—unimportant—unimportant—important—" as if he were trying which word sounded best.

Some of the jury wrote it down "important," and some "unimportant." Alice could see this, as she was near enough to look over their slates; "but it doesn't matter a bit," she thought to herself.

At this moment the King, who had been for some time busily writing in his note-book, cackled out "Silence!" and read out from his book, "Rule Forty-two. *All persons more than a mile high to leave the court.*"

Everybody looked at Alice.

In logic—as in law—there is a profound difference between evidence and proof, and in both, evidence must be rigorously tested. This is particularly true in Boolean logic, in which "soundness" and "completeness" are the two most critical properties in the construction of sentences and the validation of evidence.

When the King of Hearts attempts to decide whether Alice's evidence is "important—unimportant—unimportant—important'—as if he were trying which word sounded best," the regent is not being frivolous. The King is quite properly evaluating each word (or sentence) for soundness, or what mathematicians call a "well-formed formula" or a *wff*. The King's judgment is based on the "sound" structure of the sentence, not on its meaning in ordinary speech.

The sentence (*wff*) must be sound and complete before any conclusion (or verdict) can be reached. This is what the Queen of Hearts loudly insists upon—in her final dispute with Alice—when she says, "Sentence first—verdict afterwards."

The Queen is not being perverse: she is simply attempting to enforce the strict rules of Boolean logic in a formal system known as sentential calculus (what today is called propositional calculus). This system requires the Queen's ruthless application of axes, by which Carroll means (and repeatedly puns) axioms. Just as traditional logicians have tried to set the true rules of argument since Aristotle's time, Boole's new algebraic system defines a valid argument as sets of logically progressive

propositions.

This is why there are so many arguments rather than polite conversations in *Wonderland*. Alice is unknowingly entering into arguments that employ the formal language of sentential calculus. The Gryphon, for instance, constantly uses double negatives in his speech—this is in fact a sentential axiom of double negation. The Queen's attempt to behead the body-less Cheshire Cat is a bizarre demonstration of what is known as the axiom of the excluded middle.

In the dispute over the validity of the so-called Knave's letter, Alice says, "I don't believe there's an atom of meaning in it," and the King replies, "If there is no meaning in it, that saves a world of trouble, you know, as we needn't try to find any." In Boolean terms, a zero value would be a valid and significant conclusion.

"I'm not a mile high," said Alice.

"You are," said the King.

"Nearly two miles high," added the Queen.

"Well, I shan't go, at any rate," said Alice: "besides, that's not a regular rule: you invented it just now."

"It's the oldest rule in the book," said the King.

"Then it ought to be Number One," said Alice.

The King turned pale, and shut his note-book hastily. "Consider your verdict," he said to the jury, in a low, trembling voice.

"There's more evidence to come yet, please your Majesty," said the White Rabbit, jumping up in a great hurry; "this paper has just been picked up."

"What's in it?" said the Queen.

"I haven't opened it yet," said the White Rabbit, "but it seems to be a letter, written by the prisoner to—to somebody."

DE MORGAN'S LAWS George Boole's pioneering work on the calculus of propositions was carried forward after his death by his colleague AUGUSTUS DE MORGAN (1806–1871), author of many mathematical works, including *Formal Logic: or, The Calculus of Inference*,

Necessary and Probable (1847). He formulated De Morgan's laws and the duality principle. If we accept George Boole as our mathematician's King of Hearts, De Morgan would certainly be our mathematician's Knave of Hearts. De Morgan was the intellectual heir of George Boole, just as (presumably) the Knave of Hearts was the heir to the King of Hearts.

A passage from De Morgan's *Trigonometry and Double Algebra* (1849) is quoted by Helena M. Pycior in her "At the Intersection of Mathematics and Humour: Lewis Carroll's 'Alices' and Symbolic Algebra" (1984). In his précis to symbolic algebra, De Morgan explains: "No word nor sign of arithmetic or algebra has *one atom of meaning* throughout this chapter, the object of which is symbols, and their laws of combination, giving a symbolic algebra."

Ms. Pycior compares De Morgan's statement with Alice's declaration on the Knave's letter: "I don't believe there is an atom of meaning in it." She then firmly concludes: "The coincidence of language in De Morgan's algebraic text book and Carroll's Alice's Adventures in Wonderland is not accidental."

Coincidentally, two decades after the publication of *Wonderland*, Carroll came to know De Morgan's son, a noted artist and ceramicist. Carroll wrote in his diary in March 1887, "Called on Mr. William De Morgan and chose a set of red tiles for the large fireplace." It appears the artist knew Carroll's work as well, as the chosen tiles were decorated with figures from *Wonderland* and *Looking-Glass*: the Dodo, the Lory, the Fawn, the Eaglet and the Gryphon.

Carroll also became familiar with the paintings of William De Morgan's wife, the Pre-Raphaelite artist, Evelyn De Morgan. The De Morgans, like Carroll, were deeply interested in psychic phenomena and spiritualism. Evelyn De Morgan's paintings often depicted scenes from classical myths concerning life after death, and include her *Demeter Mourning for Persephone*.

"And yet I don't know," says the King, as he continues to examine the evidence. He then begins to deconstruct the evidence in the Knave's letter by reducing it to what logicians would call atomic sentences, or in

Alice's terms an "atom of meaning." In Boolean terms, the King is required to reduce everything to atomic units and arbitrarily attribute true or false values to each, although he must not define them—that is, the King will not ask the identity of "he or she or it."

In Boole's own words, the atomic sentences "admit indifferently of the values 0 and 1, and of these values alone." In this way, all propositions are either true (with value 1) or false (with value 0). Astonishingly, Boole's absurd-sounding system of binary logical on-off switches became the basis for all modern computer operating systems.

The trial of the Knave of Hearts is full of legal, as well as logical and mathematical, puns. In his "Metaphysics" Aristotle explains: "Those who use the language of proof must be cross-examined." This was mirrored by the White Rabbit's reminder that the King must "cross examine this witness," although Carroll makes a punning joke of this by having the King interpreting this literally: staring at the witness with such a cross expression that he complains to the Queen, "It quite makes my forehead ache!"



Augustus De Morgan: Makes a symbolic appearance.

"It must have been that," said the King, "unless it was written to nobody, which isn't usual, you know."

"Who is it directed to?" said one of the jurymen.

"It isn't directed at all," said the White Rabbit; "in fact, there's nothing written on the *outside*." He unfolded the paper as he spoke, and added "It isn't a letter, after all: it's a set of verses."

"Are they in the prisoner's handwriting?" asked another of the jurymen.

"No, they're not," said the White Rabbit, "and that's the queerest thing about it." (The jury all looked puzzled.)

"He must have imitated somebody else's hand," said the King. (The jury all brightened up again.)

"Please your Majesty," said the Knave, "I didn't write it, and they can't prove I did: there's no name signed at the end."

It has been suggested that Carroll is making a droll legal joke when the table of tarts are placed before the court as evidence: a delicious example of the *corpus delicti*, or body of proof. However, more significantly, the table of tarts suggests a pun on a table of torts (or tortious liability). Torts are essentially tables of laws of precedent that litigating lawyers must learn and cite during trials involving restitution.

Then too, it is possible to extend the punning from *tarts* to *torts* to *tauts*, as in tautology. Tautology is a key concept in propositional logic; it is a formula that is always true and can be confirmed, or proved, by use of a "truth table." So we have typical Carrollian serial, or linked, puns: a table of tarts becomes a table of torts, then transforms into a table of tauts before arriving at a truth table.

A truth table is a mathematical table used in logic—specifically in connection with Boolean algebra and propositional calculus—to determine whether a proposition is true, and—as his twentieth-century editor William Warren Bartley discovered—Carroll had employed in his *Symbolic Logic II*. That is why, at the end of the trial, our Boolean King of Hearts "went on muttering ... to himself: "We know it to be true—' that's the jury, of course,' " then confirms their judgment upon examining the table of tarts (or truth table): "'Why, there they are!' said the King triumphantly, pointing to the tarts on the table. 'Nothing can be clearer than that.'"

"If you didn't sign it," said the King, "that only makes the matter

worse. You must have meant some mischief, or else you'd have signed your name like an honest man."

There was a general clapping of hands at this: it was the first really clever thing the King had said that day.

"That proves his guilt," said the Queen.

"It proves nothing of the sort!" said Alice. "Why, you don't even know what they're about!"

"Read them," said the King.

The White Rabbit put on his spectacles. "Where shall I begin, please your Majesty?" he asked.

"Begin at the beginning," the King said gravely, "and go on till you come to the end: then stop."

There was dead silence in the court, whilst the White Rabbit read out these verses:—

Much of the humour in *Wonderland* is generated by the absurd obviousness of tautological statements when delivered in ordinary speech. They are logically circular; for example, all tautologies are necessarily true because they are tautologies. However, there are twenty-one tautologies (or axioms) that are essential rules in sentential, or propositional, logic. Alice is bewildered by many arguments that are essentially demonstrations of axioms. She is certainly unfamiliar with their Latin names: *modus ponens* or method of affirming, *modus tollens* or method of denying, *modus tollendo ponens* or method of affirming and denying, *reductio ad absurdum* or reducing to the absurd, and so on.

Two of these tautologies or axioms, known as De Morgan's laws, appear to be employed by the Knave of Hearts in his absurd defence against the equally absurd charges made against him. First: since two things are false, it is also false that either of them is true. Second: since it is false that two things both are true, at least one of them must be false. These laws are by their nature quite obvious, and so simple even a simpleton like the Knave of Hearts would be capable of raising them.

In his diary of 1858, Dodgson notes that he has purchased and placed on his reading list "De Morgan on *Chances*." He was certainly familiar with the work of the noted Cambridge mathematician and logician Augustus De Morgan, as probability was a major field of study for Carroll throughout his life.

De Morgan was also credited with what is today known as the duality principle. This is employed in the translation of concepts, theorems and mathematical structures into other concepts, theorems and structures, often by involution. Simply put: if a theorem is true, its dual is true. It is an important general principle that has application in every area of mathematics.

"They told me you had been to her, And mentioned me to him: She gave me a good character, But said I could not swim.

He sent them word I had not gone (We know it to be true):
If she should push the matter on,
What would become of you?

I gave her one, they gave him two, You gave us three or more; They all returned from him to you, Though they were mine before.

If I or she should chance to be Involved in this affair,
He trusts to you to set them free,
Exactly as we were.

My notion was that you had been (Before she had this fit)
An obstacle that came between Him, and ourselves, and it.

Don't let him know she liked them best, For this must ever be A secret, kept from all the rest,

Between yourself and me."

Lewis Carroll applied the duality principle to literature. He reasoned that if the underlying structure of his writing was mathematically logical, the linguistic structure would retain its logical integrity—and the results would be "as sensible as a dictionary" (as he wrote in *Through the Looking-Glass*). However, although grammatically logical, its message is usually absurd and comic. For, as Carroll the author—and Dodgson the logician—knew as well as any comic writer, the great secret of nonsense literature is that it is extremely sensible. That is, nonsense is humorous only if it works within a logical framework. Without logic, nonsense makes no sense.

In this courtroom of the King and Queen of Hearts, Alice has unknowingly entered into what the philosopher, logician and mathematician Bertrand Russell described as "the realm of pure mathematics": "an ordered cosmos, where pure thought can dwell." It is a heartless and frightening place—and the monstrous Queen of Hearts is well suited to be its ruler.



Logicians like the Queen of Hearts are interested not in the content of an argument but in the features that make an argument valid or invalid. It is a place governed by rules and procedures and form; there is nothing whatever in the rules about the value of emotions, morals or character, nor anything to do with content or substance.

The Queen of Hearts has to be the ruthless executioner or Wonderland could not exist at all. "Axioms cannot tolerate contradictions," Carroll

wrote in his *Symbolic Logic*; nor can the Queen of Wonderland. Contradiction in any system of logic or mathematics leads to chaos and collapse of the entire system.

"That's the most important piece of evidence we've heard yet," said the King, rubbing his hands; "so now let the jury—"

"If any one of them can explain it," said Alice (she had grown so large in the last few minutes that she wasn't a bit afraid of interrupting him), "I'll give him sixpence. *I* don't believe there's an atom of meaning in it."

The jury all wrote down on their slates, "She doesn't believe there's an atom of meaning in it," but none of them attempted to explain the paper.

"If there's no meaning in it," said the King, "that saves a world of trouble, you know, as we needn't try to find any. And yet I don't know," he went on, spreading out the verses on his knee, and looking at them with one eye; "I seem to see some meaning in them, after all. '—said I could not swim—' you can't swim, can you?" he added, turning to the Knave.

The Knave shook his head sadly. "Do I look like it?" he said. (Which he certainly did not, being made entirely of cardboard.)

"All right, so far," said the King, and he went on muttering over the verses to himself: " 'We know it to be true'—that's the jury, of course—'I gave her one, they gave him two'—why, that must be what he did with the tarts, you know—"

"But, it goes on 'they all returned from him to you,' " said Alice.

"Why, there they are!" said the King triumphantly, pointing to the tarts on the table. "Nothing can be clearer than *that*. Then again —'before she had this fit'—you never had fits, my dear, I think?" he said to the Queen.

Alice invokes the ultimate contradiction and rejects the Queen's authority. The King, Queen, Knave and all the cards are simply "made entirely of cardboard." The laws of this heartless court have no power over Alice. She challenges the Queen with "Who cares for you? You're nothing but a pack of cards!" For Alice, human values and the concerns

of the human heart ultimately must trump this heartless tyranny of abstract mathematics. Once confronted with "Alice's Evidence," the house of cards collapses in a heap, and the dreamer awakens in the real world.

Frederic Leighton's *The Return of Persephone* (1891) is the Victorian era's most famous and iconic painting of the myth. It shows her ascending from the underworld into the waiting arms of her sister-mother, Demeter—a scene that mirrors Alice's awakening from the underground dream world of Wonderland and returning to the lap of her sister Lorina (who bears the same name as their mother).

This portrayal is similar as well to that of the last tableau of the Eleusinian Mysteries of the great goddess. Like a pilgrim emerging from the Mysteries, Alice must learn to rescue herself before she can emerge from the underworld and back into the world of the living. She must do this by applying all she has learned, finally taking control in this last trial by claiming the power of the goddess within.

"Never!" said the Queen furiously, throwing an inkstand at the Lizard as she spoke. (The unfortunate little Bill had left off writing on his slate with one finger, as he found it made no mark; but he now hastily began again, using the ink, that was trickling down his face, as long as it lasted.)

"Then the words don't *fit* you," said the King, looking round the court with a smile. There was a dead silence.

"It's a pun!" the King added in an offended tone, and everybody laughed. "Let the jury consider their verdict," the King said, for about the twentieth time that day.

"No, no!" said the Queen. "Sentence first—verdict afterwards."

"Stuff and nonsense!" said Alice loudly. "The idea of having the sentence first!"

"Hold your tongue!" said the Queen, turning purple.

"I won't!" said Alice.

"Off with her head!" the Queen shouted at the top of her voice. Nobody moved.

"Who cares for *you*?" said Alice (she had grown to her full size by this time). "You're nothing but a pack of cards!"

At this the whole pack rose up into the air, and came flying down upon her: she gave a little scream, half of fright and half of anger, and tried to beat them off, and found herself lying on the bank, with her head in the lap of her sister, who was gently brushing away some dead leaves that had fluttered down from the trees upon her face.



Victorian icon: The Return of Persephone.

Donald Thomas observes this mythological motif of "the return of the dreamer" in *Wonderland* and compares it to Virgil's *Aeneid*: "Alice, like Aeneas, emerges unscathed from the dream, he by the gate of horn and she to the Oxford river bank. The horrors and predictions which Virgil's hero encountered were implacable and unalterable. But Alice triumphs. However cruel their humour or authoritarian their manner, the figures of tyranny are, at last, 'nothing but a pack of cards.'"

FORTY-TWO RULES Why does Alice's dream of Wonderland end when the trial of the Knave of Hearts suddenly and dramatically collapses like a house of cards? The reason for the downfall of Wonderland is identical to the answer to the meaning of "life, the universe and everything" in Douglas Adams's *The Hitchhiker's Guide to the Galaxy*. For both Adams and Carroll, the answer is the number 42.

Many have observed that Lewis Carroll had an obsession with the number 42, but nobody seems to know why. In the early poem *Phantasmagoria*, a ghost haunts "a man of forty-two." In *The Hunting of the Snark*—which Carroll wrote at age forty-two—we find that the Baker's luggage consists of "forty-two boxes, all carefully packed" and that "Rule 42 of the Code" sealed the Snark's fate. In *Sylvie and Bruno Concluded*, we have a gravity-operated train that passes through a long tunnel nearer the earth's centre than either end. This rapid gravity driven train journey takes 42 minutes. According to Martin Gardner, 42 minutes is "exactly the same time that it would take an object to fall through the centre of the earth ... regardless of the tunnel's length."

In *Alice's Adventures in Wonderland*, the number 42 runs amok. It begins on the title page with "Forty-two illustrations by John Tenniel." After descending into Wonderland, Alice encounters an angry Pigeon who protects her nest "night and day" and hasn't "had a wink of sleep these three weeks." This gives her egg a hatching period of 21 days + 21 nights = 42, or a unit value of $(3 \times 7 \times 2) =$ 42.

Similarly, we have the suppression of two guinea pigs in the trial scene. A guinea in English currency has a value of 21 shillings; consequently, the two guinea pigs (or piggy banks) would have a total value of 42 shillings.

In the Queen's rose garden, Alice encounters three gardeners who are animated numbered playing cards. If we add up the card numbers (2 + 5 + 7 = 14), then multiply that by the number of cards (14×3) , once again we get 42.



This episode is followed by the grand royal procession of cards. There are normally fifty-two cards in a deck; however, Carroll has been careful to leave the gardeners (the ten numbered spade cards) out of the procession, with the result that there are exactly 52 - 10 = 42 cards.

This may have something to do with the King invoking "Rule Forty-two," which, he claims, is the "oldest rule in the book." Indeed, the King's Rule Forty-two has wider and deeper implications relating to the mathematical structure of *Wonderland*.

It could be argued that the *Wonderland* adventure begins and ends with 42. Under deep cover, the number can be found at the beginning of Alice's adventures, where, in Wonderland's great hall, she recites the multiplication table. As we have seen, it is a system that is suddenly foreign to her: "Let me see: four times five is twelve, and four times six is thirteen, and four times seven is—oh dear! I shall never get to twenty at that rate!"

As Alice says, "the Multiplication Table doesn't signify." But as observed earlier, it signifies a great deal and reveals that this table essentially presents us with a problem based on scales of notation. The Wonderland multiplication table is sound up to the 12-times level in base 39, however, once we progress to the 13 times level, to maintain the rule of this system, we must employ base 42. This proves to be fatal and the entire system thereafter collapses. It is an object lesson in what may result from any mathematical system that does not submit to rigorous testing and toward absolute proof.

As we have demonstrated in chapter 2, because of number 42 (as

a base number in the Wonderland multiplication system), Alice is right to declare that she will "never get to twenty at that rate." And neither will the King of Hearts: "'Let the jury consider their verdict,' the King said, for about the twentieth time that day." But like Alice, the King never gets to twenty either. For here we find the fatal number 42 looms up once more, and brings all in Wonderland to a cataclysmic end.

It is by the authority of Rule Forty-two that the King attempts to expel Alice from the court. Alice disputes this, however, objecting that if Rule Forty-two is the "oldest rule in the book" as the King claims, "then it ought to be Number One." And with this peculiar logic, she suddenly finds herself capable of overruling the King and Queen of Hearts.

How is this possible? And why, besides the King and Queen, is Alice the only one not ordered executed? Once again, Carroll is playing a word game, this time the word-within-the-word game that he often played in letters to his child friends. In one example, he suggests that although one may find *ink* in a *drink*, it is not possible to find a *drink* in *ink*. In another, he explains that one may find *love* in a *glove*, but none outside of it. Consequently, Alice is ultimately able to overrule the King and Queen of Hearts when she discovers her true rank in this game: hidden within the word *Alice* there is an *Ace*.



From Snark: Baker has 42 pieces of luggage.

According to the rules of Carroll's card game Court Circular, in which hearts are trumps, "the Ace may be reckoned either with King, Queen, or with Two, Three." We are told the numbered heart cards in Wonderland are "the royal children," which would seem to explain why the King of Hearts initially informs the Queen that Alice "is only a child"—in fact, the youngest child. However, as an ace, she can choose to switch from the lowest-ranking heart to the highest. When she claims her power as the highest-ranked card in the deck—the Ace of Hearts—her role in Wonderland suddenly shifts from the virtually powerless to the most powerful.

Alice has finally discovered Wonderland's "rule of processions." In the ranking of Wonderland's forty-two-card deck, Alice has become the highest-ranked heart. She has become the fatal number 42 that in the Wonderland multiplication table wrecks the mathematical structure upon which Wonderland is constructed. She overrules the rulers, and claims the power to end her dream. In waking, Alice brings the whole of Wonderland down like a house of cards.

According to Pausanias (in his *Description of Greece*—c. AD 160) and others who had undergone the sacred rites of the Mysteries of the Great Goddess, after ascending from the underworld, the initiate returned to the world "clothed with the radiance of things seen and remembered." So that each initiate's experiences might be recorded while still fresh in the memory, each of the "newly born" was required "to dedicate a tablet on which is written all that each has heard or seen."

Lewis Carroll was very much concerned with the "mystic memory" of the ancients, and certainly alludes to it in the prelude to the fairy tale. Since ancient times these pilgrims wore wreaths and garlands of white flowers just like the ones Dodgson made Alice Liddell wear in one of his photographs.

"Wake up, Alice dear!" said her sister; "Why, what a long sleep you've had!"

"Oh, I've had such a curious dream!" said Alice, and she told her sister, as well as she could remember them, all these strange Adventures of hers that you have just been reading about; and, when she had finished, her sister kissed her, and said, "It was a curious dream, dear, certainly; but now run in to your tea: it's getting late." So Alice got up and ran off, thinking while she ran, as well she might, what a wonderful dream it had been.

But her sister sat still just as she left her, leaning her head on her hand, watching the setting sun, and thinking of little Alice and all her wonderful Adventures, till she too began dreaming after a fashion, and this was her dream:—

First, she dreamed of little Alice herself, and once again the tiny hands were clasped upon her knee, and the bright eager eyes were looking up into hers—she could hear the very tones of her voice, and see that queer little toss of her head to keep back the wandering hair that *would* always get into her eyes—and still as she listened, or seemed to listen, the whole place around her became alive with the strange creatures of her little sister's dream.

The long grass rustled at her feet as the White Rabbit hurried by—the frightened Mouse splashed his way through the neighbouring pool—she could hear the rattle of the teacups as the March Hare

and his friends shared their never-ending meal, and the shrill voice of the Queen ordering off her unfortunate guests to execution—once more the pig-baby was sneezing on the Duchess's knee, while plates and dishes crashed around it—once more the shriek of the Gryphon, the squeaking of the Lizard's slate-pencil, and the choking of the suppressed guinea-pigs, filled the air, mixed up with the distant sobs of the miserable Mock Turtle.

In the end, Alice returns to her dreaming body by her sister's side under a tree on the riverbank, and to her everyday life. Now, though, Alice has a wise old soul and retains the memory of her dream world, and she recounts her experience to her sister.

Then too, her sister Lorina "began dreaming after a fashion," picturing herself passing on Alice's dream to other children; while the author records them in a dedicated book in "which is written all that each has heard or seen," so the story of the adventure and the revealed mystery of Wonderland might enter the minds and imaginations of children throughout the world.

Of course this is all clearly foreshadowed in the last stanza of Carroll's prelude poem:

Alice! A childish story take,
And with a gentle hand
Lay it where Childhood's dreams are twined
In Memory's mystic band,
Like pilgrim's wither'd wreath of flowers
Pluck'd in a far-off land

Curiously enough, Lewis Carroll was not alone in linking Alice Liddell to classical Greek goddesses. The great Victorian photographer Julia Margaret Cameron dressed a twenty-year-old Alice in classical costumes so she might pose for no fewer than three versions of Persephone-Demeter. These variations on the theme of the Great Goddess were: Ceres the Roman goddess of the harvest, Aletheia the goddess of truth and justice and Pomona, the Roman goddess of fruitfulness.



Alice as Ceres-Demeter, by Julia Margaret Cameron, 1872.

So she sat on, with closed eyes, and half believed herself in Wonderland, though she knew she had but to open them again, and all would change to dull reality—the grass would be only rustling in the wind, and the pool rippling to the waving of the reeds—the rattling teacups would change to tinkling sheep-bells, and the Queen's shrill cries to the voice of the shepherd boy—and the sneeze of the baby, the shriek of the Gryphon, and all the other queer noises, would change (she knew) to the confused clamour of the busy farm-yard—while the lowing of the cattle in the distance would take the place of the Mock Turtle's heavy sobs.

Lastly, she pictured to herself how this same little sister of hers would, in the after-time, be herself a grown woman; and how she would keep, through all her riper years, the simple and loving heart of her childhood: and how she would gather about her other little children, and make *their* eyes bright and eager with many a strange tale, perhaps even with the dream of Wonderland of long ago; and how she would feel with all their simple sorrows, and find a pleasure in all their simple joys, remembering her own child-life, and the happy summer days.

THE END.



Alice as Aletheia, Greek goddess of truth.



Alice as Pomona, Roman goddess of fruitfulness.

"He was not required to teach if he chose not to.... If he wished, he might recline in his easy chair, his feet up by the fire, drink his claret, and smoke a pipe for the rest of his life." MOTON

Cohen, in his biography of Lewis Carroll

Part Two: After Wonderland



I. SENTENCE FIRST—VERDICT AFTERWARDS! The most enduring and disputed mystery in the life of Lewis Carroll is the circumstances and reasons behind Mr. and Mrs. Liddell's decision one weekend in June of 1863 to suddenly end his friendship with Alice, and virtually to ban him from visiting the Deanery, or making contact with any of the Liddell children. It is a mystery made rather more sinister by the fact that the only record of that weekend—Charles Dodgson's diary—has had its pages covering the events of those crucial days cut out.

Like the Knave of Hearts, Charles Dodgson had been summoned on the 28th of June 1863 to appear before Oxford's King and Queen of Hearts—the dean and Mrs. Liddell. As Dodgson undoubtedly saw it, Mrs. Liddell had already decided on the matter. Like the Queen of Hearts, she insisted on "Sentence first—verdict afterwards." We cannot know the precise charges brought against Dodgson by the dean and Mrs. Liddell, but the two most common speculations are inappropriate behaviour or a proposal of marriage.

Today, Charles Dodgson's fascination with prepubescent girls would seem highly suspect. In the Victorian era, though, it would not have been so unusual. As we have observed, the era was marked by a popular, sentimental cult of the child. Artists and writers unashamedly celebrated "divine beauty" in a child who came so recently from the hand of the Maker or, in William Wordsworth's memorable phrase, "trailing clouds of glory."

Though any psychologist today would recognize that Dodgson had a sexual obsession with very young girls, any close reading of his diaries and letters lead one to believe that he had almost entirely suppressed his sexuality. Dodgson was either uninterested in or intimidated by a mature sexual relationship, and persuaded himself that he had found a healthy and legitimate outlet for his need to love and be loved in what he saw as innocent and pure friendships with children.

He of course lived in a society that not only was unaware of the idea of the subconscious mind but would be shocked by the suggestion of its existence. It is unlikely that Dodgson would have allowed himself intentionally to foster overtly sexual fantasies of any sort. He would have disguised these emotions and would have thought of his love for children as a desire to see in them the beauty of a kind of divine natural

innocence. He certainly would never have allowed himself to—as he would see it—debase this beauty.

This is not to suggest that Dodgson's perspective was healthy, or that his behaviour did not go without notice or criticism. But it seems unlikely that he would have committed any act of indecency toward Alice or any other child. Had his obsessions been overtly sexual, it would have been quite easy for him to procure children. In Victorian London, child prostitution was not uncommon. In the streets Dodgson frequented around the city's theatre district, child prostitutes were readily available for a few shillings. Indeed, Dodgson wrote numerous letters to the editor and to influential politicians such as Lord Salisbury in his attempt to censor newspapers for what he considered the morally corrupting influence of their lurid exposé of child prostitution.

Dodgson was, however, fond of affectionately hugging and kissing little girls. His letters to little girls were unashamedly sealed with kisses. But his behaviour, and the tenor of the hundreds of letters and notes he sent to the Liddell children, do not appear to have made the senior Liddells suspicious of the young man's intentions.

The suggestion that Charles Dodgson might have made a proposal of marriage to Alice is even more unlikely. It is true that in the Victorian era marriage arrangements were occasionally made for girls as young as twelve, but in this case it is most improbable.

The Liddells were aristocracy and Dodgson was definitely not. As a college lecturer, he was on the lowest rung of Christ Church's social scale. Also, Dodgson knew full well that if he married he would automatically lose his position at the college, as lecturers and tutors were required to remain single and celibate. And as he had already decided not to be ordained as a priest, without his position at Christ Church, he would have had no immediate prospect of making a living.

Furthermore, from a young age Charles Dodgson had been made firmly aware of the drawbacks of marriage for anyone with academic ambitions. His father had sacrificed a brilliant future at Christ Church—after winning a double first in mathematics—because he chose to marry. Instead, the elder Dodgson was given a relatively meagre living for himself and his family in a remote rural parish.



Lorina (standing): The reason for the family's break with Dodgson?

What, then, was the reason for this sudden break in Dodgson's relations with the Liddells and their children? The most likely scenario is that the Liddells were actually focused on the reputation of Alice's oldest sister, Lorina, who was then fourteen. Given that in Britain girls were legally marriageable at the age of twelve, the Liddells would not have been accused of being oversensitive in removing Lorina from the constant companionship of a thirty-one-year-old unmarried man.

In May of 1996, an article by Karoline Leach in the *Times Literary Supplement* revealed the contents of the pages missing from Dodgson's diaries for June 27 through June 29, 1863. A note on a scrap of paper had been discovered in the Dodgson family archives. Headed "Cut Pages in Diary," it read: "L. C. learns from Mrs. Liddell that he is supposed to be using the children as a means of paying court to the governess—he is also supposed by some to be courting Ina [Lorina]."

The handwriting on the note is recognizable as that of Dodgson's niece Violet Dodgson, who was co-guardian of the diaries with her sister, Menella, from the early 1940s to the 1960s. Violet appears to have read through the diaries noting the pages deemed inappropriate and summarized their most important contents. It is presumed that either she or Menella then made the decision to cut the pages from the diary.

Whether or not anything occurred on the night of June 27 after the boat trip from Nuneham, it is obvious that Mrs. Liddell decided it was

time to end Dodgson's relationship with her children. She told him rumours were circulating both about him and the governess and about him and Lorina.

Either would have been considered inappropriate—although Mrs. Liddell's concern would naturally have been primarily for her eldest daughter's good name and how this would affect her prospects of marriage. As a result, Dodgson was either told or firmly requested to stay away. There is no mention whatsoever in Violet Dodgson's note of anything to do with Alice.

The Liddell children's governess was Miss Mary Prickett, or Pricks as they affectionately called her. She was the daughter of a college butler and was twenty-five when first employed by the Liddells in 1856. She was the family's governess for fifteen years. In *Wonderland*, she is recognizable as the Mouse whom Alice encounters in the Pool of Tears.

Dodgson had been aware of the gossip for a number of years, and initially was shocked at the suggestion of his having any interest in the unattractive Miss Prickett. Recording these rumours in his diary as early as May of 1857, Dodgson initially resolved to distance himself from the governess and the children. However, he found himself incapable of staying away, especially as the children's parents were soon to be absent for several months in Madeira, leaving his access to the Deanery unhindered.



Striking: Lorina by Dodgson.

Dodgson ostensibly satisfied himself that the gossip was "so groundless a rumour" and chose to simply continue as before—despite the objections of the children's grandmother and his concerns for the reputation of Miss Prickett. He consciously exploited this period of parental absence to successfully cement his relationship with the children.

At the time of the confrontation with the dean and his wife in June 1863, Lorina Charlotte was tall, striking and physically mature for her age. Even Dodgson appears to have become aware of the problem her age would soon present. On August 6, 1862, he observed in his diary this was Lorina's "fourteenth time" on the river with him, and he thinks it likely she will probably not be allowed to go with him and her sisters for much longer. On April 17, 1863—just two months before their last river trip—he wrote in his diary how Lorina had grown "so tall," and that for the first time Mrs. Liddell had insisted on a chaperone to accompany them.

Dodgson was no more likely to have behaved inappropriately toward Lorina than he was toward Alice. However, in either case, he would very likely have taken offence at the suggestion that he had behaved inappropriately toward any child in his charge. We need only look to his advice to his brother Wilfred, in a letter written a month before the publication of *Wonderland* in 1865. It seems that the twenty-seven-year-old Wilfred had fallen in love with a young girl whose name was also Alice, an Alice Donkin who was fourteen. Charles advised his brother to keep away from Barmby Moor—the Donkin home—for a couple of years. His brother appears to have taken the advice. In fact, he waited another six years and married Alice Donkin when she'd reached the age of twenty.



THE INVISIBLE COLLEGE We are not yet done with 42. In the Kabbalah, 42 is the number with which God creates the universe, and in the Talmud there are forty-two letters in the true name of God. Ancient Egypt divided into forty-two districts or provinces (called nomes). This is comparable to the emblematic Rosicrucian rose.

Robert Fludd's illustration of the Rosy Cross is a seven-petal rose arranged in six consecutive rings. The resulting forty-two petals are emblematic of the pilgrim's journey and a mapping of the levels of its temple of wisdom. Fludd's Latin inscription translates as "The rose gives bees honey." In the engraving we see honeybees at work, like alchemical adepts, gathering from the rose the "honey of theosophical knowledge."

Numerology was an obsession for both the Freemasons and the Rosicrucians, as it had been for the ancient Egyptians and Alexandrian theosophists. Massive building projects both religious and secular were informed by the mystical significance of numbers and the sacred geography and architecture of these mystical realms.

Much of Oxford University was created by men such as Elias Ashmole, Thomas Bodley and John Radcliffe, who commissioned like-minded architects—Sir Christopher Wren and Nicholas Hawksmoor among them —to build colleges and institutions based on Rosicrucian and Masonic specifications. Victor Hugo saw the great cathedral of Notre-Dame in Paris as one of the most spectacular monuments to hermetic science ever built. Hugo observed that the sacred geometry and hermetic symbolism that the medieval masons built into the architecture and sculpture of this great cathedral resulted in a massive "mute book" in stone.

On an even greater scale, the collective architecture of the ancient colleges of Oxford is a collection of similar "mute books." The inspiration for what is perhaps Oxford's most distinctive building, the Radcliffe Camera*—which once housed a science library and is now one of the Bodleian Library's reading rooms—is found in *Fama fraternitatis* (1614), the first pamphlet of the Brotherhood of the Rosy Cross, with its illustration of an imaginary "Invisible College."

Rosicrucian and Freemason influence is especially apparent in Christ Church's Tom Quad, Oxford's largest and grandest quadrangle. The central feature of the quadrangle is a circular fountain with an antique

bronze statue of Mercury.** The fountain was built in imitation of the emblematic fountain of Mercury in the garden of the Rosy Cross as portrayed in the *Cabala*.

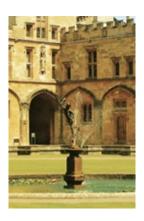
Lewis Carroll knew of the fountain's significance and wrote about it on many occasions. For nearly half a century, he lived in his rooms in Tom Quad, and each day passed by the fountain. In his *Vision of the Three T's*, Carroll's narrator speaks in tones of reverence—"Methought that, in some bygone Age, I stood beside the waters of Mercury, and saw, reflected on its placid face, the grand old buildings of the Great Quadrangle"—while conjuring up the ghost of the college's founder, Cardinal Wolsey.





The Rosicrucian "Invisible College" inspired Oxford's Radcliffe Camera.

In the fairy tale of *Wonderland*, Alice returns from her fictional dreaming to the waking world on the riverbank. On the theosophical level, it is significant that the eventual end to that real-life boating expedition with Alice Liddell was Christ Church College at the final destination of the Rosicrucian pilgrim: the fountain of Mercury whose pool at the centre of Tom Quad just happens to have a diameter of exactly 42 feet.



Fountain of Mercury: Vandalized by Lord Stanley.

Dodgson would likely have accepted that Lorina Charlotte had become too grown up to be permitted to go on boating picnics with an unmarried man. But he would have been shocked and disappointed to be banned from the company of Alice and Edith. Dodgson would undoubtedly have felt aggrieved at the sudden decision to remove all three sisters (not to mention their son and other daughter) from his company.

Mrs. Liddell, for whatever reason, wished to protect all of her children from the taint of further gossip and decided that Dodgson must keep his distance. To Dodgson's burning ears, this would have seemed a declaration that he could no longer be trusted with the safe care of the children. He would have been angry and deeply insulted.

To be fair to the dean and Mrs. Liddell, they would probably not have seen the episode as hugely significant. For his part, the dean seems to have never been much concerned with domestic matters. He was, after all, the dean of Christ Church Cathedral and head of the college, and so had much more on his mind. Mrs. Liddell, it is true, had always seemed somewhat wary of Dodgson's attentions; however, her decision to end contact wouldn't have struck her as any more noteworthy than disposing

of a nanny or a tutor when their services were no longer required. Other tutors and nannies had quietly drifted in and out of the Deanery over the years. It is likely that both the dean and Mrs. Liddell viewed Dodgson's time as a companion to their children in much the same light. They could have no idea how great a matter of the heart this event was to become for Charles Dodgson.

In later years, once Dodgson had become the famous author of the Alice books, his response to this indignity over what he saw as an issue of trust would become ever more extreme. If, for instance, the mother of one of his child-friends requested that a chaperone be present during a nude or semi-nude photographic session, Dodgson would invariably take this as an egregious insult.

In 1879, for example, one in a particularly unpleasant and bullying exchange of letters with a Mrs. A. L. Mayhew ends with a petulant Dodgson writing: "The fact that I have so unfortunately learnt, that you consider your presence *essential*, which is the same as saying 'I cannot trust you,' has taken away all the pleasure I could have in doing any such pictures." He ends another letter to her irascibly, "If you can't trust my word, then please never bring or send any of the children again! I should certainly prefer, in any case, to drop the acquaintance."

Dodgson would not have dared to be so brusque with the socially superior dean and Mrs. Liddell. After his forced agreement to stay away from the children, he soon began to look for some means of venting his repressed anger and need to wreak revenge in a manner that he could morally justify to himself.

This may explain, to some degree, what happened to Alice Liddell's fairy tale in the time between the composition of its first draft as *Alice's Adventures Under Ground* and its much darker and more detailed final form as *Alice's Adventures in Wonderland*.

Dodgson began to behave like a jilted lover but seems to have successfully masked his real motive from himself. He did this by convincing himself that he would, from that time on, as a matter of moral conscience, stand up forcefully for his conservative principles and oppose all of the liberal Dean Liddell's reforms and programs at Christ Church.

To understand Dodgson's gadfly behaviour over his many years at Christ Church, we need to look at the highly charged politics of Oxford and the great debate over higher education in the whole of Britain. For several decades, this was one of the most divisive social and political issues in the land. Nowhere was this more true than in Oxford.

Let us, as the King of Hearts stated, "Begin at the beginning."

II. FROM ALICE TO MALICE Charles Dodgson first took up residence at Christ Church in 1851—the same year he so enthusiastically attended the Great Exhibition at the spectacular Crystal Palace in London. In the wake of the Napoleonic Wars, Britain gave birth to the Industrial Revolution and a manufacturing system that would dominate world trade. Victorian Britain was the wealthiest and most advanced industrial nation on earth. It was a time of conquest and colonization, and Britain employed an allpowerful army and navy that embarked on adventures in India, Russia, Afghanistan, China and Africa. The result was a vast expansion of influence and power that would soon result in the consolidation of the greatest empire in the history of the world. A year after the launch of the Great Exhibition, there was another momentous grand opening—that of the House of Commons, in the spectacular new Palace of Westminster, a stunning eleven-hundred-room Gothic Revival palace on the banks of the Thames. This was the new home for the "mother of parliaments" that was to serve as a model to the world of the power and glory of a democratic system of government married to a constitutional monarchy.

This period also witnessed the expansion of male suffrage, and the influence of the aristocracy and the clergy in Britain was beginning to fade before that of the rising middle class and the new barons of industry. It was becoming increasingly evident that the higher educational requirements of these rising social classes in trade and industry throughout the empire were not being met by the traditional disciplines of institutions of higher education, especially in the fields of science, technology and engineering.





Grand openings: The Houses of Parliament (above) and the Crystal Palace (below).

In 1851, Oxford was essentially governed by medieval clerical regulations and a system of privilege that had little to do with academic achievement. The curriculum for nearly all aspects of what was called a classical education had virtually no practical application. Entry into colleges was based on influence, social position and knowledge of two dead languages, Latin and Greek.

In the college dining hall, social distinctions were clearly delineated. High table with the dean and canons of the college—along with the aristocratic undergraduates (distinguished by gold-tasselled caps and gowns)—was set upon a dais. Senior masters sat above the fireplace on the north side and junior ones were above the fireplace on the south side. Below on the north side were the bachelors of arts, and below them the gentlemen commoners—Dodgson was one of these. The only college members lower were the servants of the high table, who received an education in return for their servitude.

What we now would consider institutional corruption and nepotism

could not be validly applied to Britain's system of higher education at that time. The entire point of awarding fellowships at university colleges (in Christ Church, these were known as studentships) was to maintain the status quo of the aristocracy and the clergy. William Tuckwell, in his *Reminiscences of Oxford*, quotes the senior canon of Christ Church, Dr. Frederick Barnes: "I've given studentships to my sons, and to my nephews, and to my nephews' children, and there are no more of my family left. I shall have to give them by merit one of these days!"

Barnes remained in the splendour of his canon's residence at Christ Church for fifty years, until his death at the age of eighty-eight in 1859. This was by no means a record for Christ Church residents. Dodgson himself remained in residence for forty-eight years, while Thomas James Prout occupied his rooms until carried out in a box after sixty-seven years.

To many in government, Christ Church came to signify everything that was wrong with higher learning in Britain. How could a modern industrial nation tolerate such outdated institutions? Reformers wanted all college fellowships opened to competitive examinations and wished to oversee a transfer of powers from the clergy to the academicians. They sought an end to the lifelong appointment of resident dons and the requirements of celibacy, dawn prayers and the taking of holy orders. Most radically, they wished to open Oxford colleges to other Christian denominations, as they were forced to confront the fact that half the population of Britain was not Anglican.

The administration and most of the old guard at Christ Church resisted all attempts to bring it in tune with the demands of the modern world. Thomas Gaisford, Regius Professor of Greek and dean of Christ Church since 1831, was determined to fight the "serious evils" (as he and the chapter wrote in a petition to Parliament) of university reform. Dean Gaisford never gave lectures, and was opposed to entry to Oxford based on "mere intellectual merit." In a famous sermon, Gaisford stated his profound belief that the study of Greek was the most desirable acquisition of higher education, as it "not only elevates above the vulgar herd, but leads not infrequently to positions of considerable emolument."

Under Gaisford, lectures and all business at Christ Church were still conducted in Latin. The statutes required celibacy in students and lecturers, compulsory attendance at dawn prayers and contained such medieval rulings as forbidding the discharging of crossbows within the college grounds. Not until parliament forced the issue with the University Reform Act of 1854 could anyone attend an Oxford college who was not a member of the Anglican Church and who did not swear to uphold the church's Thirty-Nine Articles.



On his throne: The reforming Dean Liddell.

The following year, in May of 1855, everything changed. Dean Gaisford unexpectedly dropped dead. As the faculty at Christ Church rightly observed, Gaisford was the last bastion of defence for the traditionalists. The government of Lord Palmerston had had enough of entrenched reactionary forces at Oxford and their obstruction of much-needed reform in all institutions of higher learning.

The government created the Hebdomadal Council to be the governing body of the university in an attempt to end the most blatant policies of patronage, and instituted a system of academic competition for university posts. The government's liberal reformers would now have their way through the appointment of a new dean.

"Now nothing but what is evil is threatened by his [Gaisford's] successor," predicted Canon Pusey, Dodgson's mentor (and his model for the Cheshire Cat). And that "evil" was seen to be embodied in the new dean of Christ Church: Henry George Liddell, the reforming headmaster of Westminster School, former student at Christ Church and liberal member of the 1850 Royal Commission on Oxford University.

Liddell was guilty of three great sins. The first was that as a Church of

England minister he brought about the beginning of the end of that church's control over academic life. His second great betrayal was to have used his authority as an aristocrat in an attempt to end the system of privilege in universities. His third was that, despite being one of the greatest classical Greek scholars of his time, he wished to put an end to Greek being a prerequisite for a university education in the sciences.

The dean's reception upon his arrival at Christ Church was not just a matter of putting up with a resentful faculty who had gained their places at Christ Church through the very system Liddell was seeking to dismantle. Nor did he simply have to endure relentless plotting against his authority. There were many more extreme measures of resistance in the form of riots, acts of vandalism, arson attacks and death threats.

The dean himself gives a harrowing account of events during the first weeks of his family's arrival at Christ Church. Liddell's description of the manner of his greeting at Christ Church and Oxford is a masterpiece of understatement:

When I first came, I confess my heart often sank; it is hardly too much to say that hardly a week passed without some disturbance. Gunpowder was freely used in such a way as to terrify not only the inmates of the House, but all the neighbourhood. One night, not very long after I took possession, a kettle charged with gunpowder was found fastened to the handle of my front door with a match inserted by the spout; and had the match taken effect, probably the door would have been blown in and immense injury done. About the same time, Mrs. Liddell received an anonymous letter, in which she was advised to quit the house with her young family, because in the course of a few nights it was to be blown up.



Resistance: Rioting in Christ Church.

Nonetheless, the battle was lost. Reform was on its way. The demands of empire and industry required it. Both the Liberal Party under Palmerston and Gladstone and the Conservative Party under Derby and Disraeli wanted reform of the Education Act. But the old guard at Oxford stubbornly fought on. Liddell had to constantly battle against an entrenched faculty that had secured their positions through the old system of privilege and patronage.

The parliamentary acts of 1854 and 1856 did away with medieval regulations—and in theory at least—required fellowships to be awarded on academic merit and opened the universities to non-Anglicans and to the middle class generally. Later parliamentary acts provided a more liberal curriculum that accommodated the needs of candidates who were not seeking honours degrees but simply wanted a good general education. And yet, it was not until 1877 that the University Reform Act ended the celibacy requirement for Oxford dons.

Dodgson was among the last to gain a lifetime fellowship at Christ Church based on the old system. He was also among those who believed "nothing good" would come of the appointment of the new dean. He appears to have been quite wrong, at least as far as his position was concerned. By the end of his first year, Dean Liddell made a number of generous gestures in an attempt to pacify the entrenched conservative faculty; among them was the appointment of Dodgson as mathematical lecturer. It would have been exceptional to appoint a B.A. to this position, so Liddell did something even more exceptional, and made

Dodgson an honorary Master of the House well in advance of his acquisition of a master's degree. But, if the dean expected anything in the way of gratitude or loyalty from Dodgson—or any of the other conservative dons at Christ Church—he was to be sadly disappointed.

Anyone other than Charles Dodgson might have been content with this new position. As his biographer Morton Cohen has noted, "he was not required to teach if he chose not to, nor was he expected necessarily to publish or to achieve any other distinction. If he wished, he might recline in his easy chair, his feet up by the fire, drink his claret, and smoke a pipe for the rest of his life."

Yet Charles Dodgson was not that sort of man. Nor was his political position in any way flexible. Even though his position as an active member of Christ Church was considerably improved through the generous acts of this new liberal dean, it appears that Dodgson could never forgive anyone who attempted to bring an end to Oxford's ancient old boys' system.

However illogically, Dodgson spent the rest of his life conspiring against any and all modernizers of the academy. His political sympathies at both university and government levels had always been with the conservatives, and he was steadfastly against any liberal reform of the system that had given him his privileged position at Christ Church.

It was in 1856—shortly after his appointment as honorary Master of the House—that Dodgson first encountered the Liddell children while taking photographs in the Deanery garden. Over the next six years he became very much a part of the Liddell children's lives: boating trips, tea parties, private lessons, photographic sessions and long afternoons taken up with games, magic shows, dramatic performances and the telling of fairy tales.

Although a great part of Dodgson's leisure time for several years was spent with the dean's children, he seems to have thought that this did not require any form of personal loyalty. It is difficult to see how Dodgson could expect the dean to look benignly on this young mathematics don who one week took the Liddell girls boating and the next became a co-conspirator plotting against their father's academic programs and reforms.

From Carroll's own diaries, it does seem that he must have believed—naively perhaps—that these contradictory actions in private and public

life would somehow present no difficulty in his relationships with the Liddell family.

During this time—1856 and 1857—Dodgson became deeply involved in a revolt among the conservative junior dons led by his friend Thomas Prout (*Wonderland*'s Mouse) against the dean and canons of Christ Church. This was the source of one version of the Mouse's tale in *Wonderland*. Dodgson played a vigorous part in the deliberations, proposing and amending clauses and writing directly to arbiters with his own proposals for change.

Just how entrenched Dodgson's anti-liberal bias was, was made fairly clear when it came to the matter of electing the new Oxford Professor of Poetry in 1857. His diary records the meeting in the common room in which the dons agreed to put up John Ernest Bode as candidate for the professorship. Bode was a minor and undistinguished poet of ballads and hymns, but a conservative in all matters aesthetic and political.



Matthew Arnold: English-speaking Professor of Poetry.

This support of a poet as mundane as Bode was all the more remarkable given that he was chosen by Carroll and his colleagues over the other candidate, Matthew Arnold: who was already widely celebrated as a major poet of some importance. However, because his father, Thomas Arnold—the famous headmaster of Rugby School—was a powerful exponent of the progressive trends in British education, the conservative faction of Christ Church voted against him. Nonetheless,

other colleges had their say as well, and Matthew Arnold was appointed Oxford Professor of Poetry and, much to Dodgson's chagrin, became the first professor to deliver his lectures in English rather than Latin.

Charles Dodgson attached himself to any number of attempts to block any election to office of those perceived to be liberal allies of the dean. Certainly, he gave his support to the long struggle by conservative forces in the university to block the appointment of the liberal Benjamin Jowett (*Wonderland*'s Father William) as master of Balliol College, and then, with that achieved, to a decade-long struggle to withhold a reasonable stipend for his services as the Regius Professor of Greek.

Just why Dodgson felt compelled to oppose publicly the dean's appointments and then attack his policies without apparently expecting some negative personal response from his superior is rather a mystery. And indeed, it is unlikely that most administrators would have tolerated this behaviour for as long as Liddell did.

Perhaps initially, Dodgson's actions as an opponent to the dean's reforms were at a somewhat low level and did not result in great notoriety in the mind of Liddell in his role as the head of the college. The dean, after all, had greater immediate obstacles in his path and had many more obvious and formidable foes.

Still, considering what followed, it is remarkable that the dean did not rid himself of this troublesome lecturer when the opportunity arose—as it did just four short months after the famous 1862 river trip on which Dodgson told the tale that became *Alice's Adventures in Wonderland*. For that year, Charles Dodgson's career and position at Christ Church were very much in jeopardy.

Dodgson, it seems, was a traditional conservative only so long as those traditions suited him. As he himself noted in a letter to his cousin William Wilcox, his mentor Canon Pusey "sent for me, and told me he would like to nominate me [for a studentship], but he made a rule to nominate only those who were going to take Holy Orders. I told him that was my intention, and he nominated me. That was a sort of *condition*, no doubt." However, when Dodgson changed his mind about becoming ordained, he dismissed this "sort of condition" and somewhat conveniently claimed he didn't see this "as in any way a breach of contract."

Others did not see this as a "sort of condition." The ancient rules at

Christ Church were quite clear, and Dodgson's position came with two major conditions: he must not marry and he must take holy orders and enter the priesthood.

Dodgson, however, found he quite cherished his place in academia and did not wish to be burdened by parochial work. He seems to have had little interest in or talent for dealing with common parishioners or carrying out tiresome clerical duties. Nor did he wish to give up his bachelor don's lifestyle with its guaranteed income for life, its free palatial apartment and its dining and common-room privileges. Nor would he wish to give up his photography, his literary ambitions, his mathematical studies or his enthusiasm for the theatre. Dodgson's dedication to the theatre was as firm as his dedication to his religion, but the ban on clergymen attending the theatre was at that time absolute.

Holding back on the decision to take a priest's orders, Dodgson decided instead to take deacon's orders "as a sort of experiment, which would enable me to try how the occupation of a clergyman suited me, & then decide whether I would take full Orders."

On December 22, 1861, Dodgson received from Bishop Wilberforce his certificate of ordination as a deacon. As he saw it, this gave him the prestige of being a clergyman without being encumbered by any of the attendant duties of a priest. Dodgson took the view that "a deacon might lawfully, if he found himself unfit for the work, abstain from direct ministerial duties."

In this rather convoluted manner, Dodgson seems to have wished to have it both ways: arguing that—depending on the circumstances—as a deacon, he was allowed to be both a *kind of* clergyman and a *kind of* layman. In matters such as theatre attendance or committing to parochial duties, his position was that a deacon's ordination was quite different from a priest's, and as such he was "free to regard himself as *practically* a layman." In matters where he found it convenient to assume the authority of a man of the cloth, Dodgson would invariably refer to himself as entirely a clergyman.

The precarious reasoning behind this legalistic balancing act was that by failing to take holy orders, Dodgson put his position at Christ Church in question. Realizing that this dilemma must be resolved, on October 21, 1862, he finally presented himself to Dean Liddell, as he wrote in his diary, "to ask him if I was in any way obliged to take Priests' Orders,"

immediately adding, "(I consider mine as a Lay Studentship)."

Dodgson records that the dean's opinion—not surprisingly—"was that by being ordained Deacon I became a Clerical Student, and so subject to the same conditions as if I had taken a Clerical Studentship, *viz.* that I must take Priests' Orders within four years from my time for being M.A. and that as this was clearly impossible in my case"—five years having already passed—"I have probably lost the Studentship, and am at least bound to take Priests' Orders as soon as possible."

Dodgson's only defence was an unconvincing repetition of his mantra: "I consider mine as a Lay Studentship." On his own authority, the dean could have decided on termination, but suggested the question should be properly settled by "laying the matter before the electors"—although, as Dodgson feared, it is not likely they would have decided in his favour.

The next day brought an unexpected reversal. Dodgson's diary reads: "The Dean has decided on not consulting the electors, and says he shall do nothing more about it, so I consider myself free as to being ordained Priest."

The dean had once again bent the rules to accommodate Dodgson. Why he should take such an extraordinary step is to this day a mystery. Perhaps Dean Liddell's character somewhat mirrored that of the essentially compassionate King of Hearts, who frequently pardoned all those whom his wife would certainly have executed. It is likely that the dean's wife would have cause to remind him of the countless obstructions placed before him that were a result of this single act of unreciprocated kindness toward Dodgson.

Although busy writing and illustrating a handmade version of *Alice's Adventures Under Ground* and in constant contact with the Liddell children, Dodgson never seems to have given the slightest sign of gratitude to the dean for this decision. Rather, he felt quite entitled to continue to attack the dean's liberal initiatives.

Indeed, only a few months after Dodgson had secured his post at Christ Church, he published anonymously a squib entitled "The Majesty of Justice." This was an attack on Dean Liddell and other liberal supporters of Benjamin Jowett, who—at the instigation of Canon Pusey and other conservative Churchmen—was quite absurdly to be tried for heresy.

Jowett had been named one of the "Seven Against Christ" for his essay

"On the Interpretation of Scripture," published in 1860 in a best-selling theological anthology entitled *Essays and Reviews*. He was charged with publishing teachings contrary to the doctrines of the Church of England. Because of confusion over jurisdiction, he was tried not at the ecclesiastical Court of Arches at Canterbury—where there was a fair chance of conviction—but in Oxford's lower Court of the Vice-Chancellor, where the charges were summarily dismissed on a technicality. The dismissal outraged Jowett's opponents.

"The Majesty of Justice" was aimed at Dean Liddell's Liberal (Whig) faction at Oxford, whom Dodgson accuses of influencing the court to dismiss the case against Jowett: "That makes the silliest men *Seem wise; the meanest men look big:* The Majesty of Justice, then, / Is seated in the WIG."

The Majesty of Justice judge is undoubtedly comparable to Wonderland's court of justice judge, recognized as such by Alice "because of his great wig." The judge was the King of Hearts, "and as he wore his crown over the wig ... he did not look at all comfortable, and it was certainly not becoming."



Benjamin Jowett: One of the "Seven Against Christ."

Dodgson's actions and publications consisted mostly of minor pot shots at the Liberal appointments and initiatives, and he did not yet stand out substantially as a significant figure in the conservative faction. He did not make himself known as a major opponent who was willing to attack not only the Liberal cause but the dean himself. But that changed after the mysterious showdown in June 1863, after which Dodgson found himself permanently exiled from the Deanery. He could find no way back into the good graces of the Liddell family, and especially those of the formidable Mrs. Liddell.

Dodgson made an attempt at reconciliation by having his handwritten and personally illustrated *Alice's Adventures Under Ground* bound in green leather and sent as a gift for Alice. It was delivered to the Deanery for Christmas 1863, but no notification of its receipt or message of thanks came in return.

Over the next two years, Dodgson obsessed over the manuscript, intensely revising and adding, creating the much larger and more detailed *Alice's Adventures in Wonderland*. The new version very much expanded the roles of the King and Queen of Hearts and the story of the trial, as well as introduced many new characters and episodes. Notably, it also painted a much darker picture of the realm and actions of the King and Queen of Hearts.

During these two years—between the November 1863 delivery of *Alice's Adventures Under Ground* and the December 1865 publication of *Alice's Adventures in Wonderland*—Dodgson penned a flurry of squibs, satires and letters to newspapers that directly and publicly attacked Dean Liddell's policies and agendas. He was no longer content with low-key political agitation and anonymous publications.



Dean Liddell: Attacked in squibs, satires and letters to newspapers.

In January 1864, the dean announced that one of the junior studentships would be "adjudged to the candidate who shows the greatest proficiency in Mathematics." On the face of it, this was a fair and reasonable means of selection. Liddell, though, had not consulted Dodgson beforehand. Dodgson, as an examiner in mathematics at Christ Church, immediately wrote an indignant letter of protest.

Rather astonished at the tone of the letter, the dean wrote in reply that Dodgson's objections were both "hypercritical and unnecessary," but wishing to be somewhat conciliatory, Liddell offered to modify future notices. This simply was not good enough for the irate Dodgson, who refused to assess these candidates—and who in any case was of the opinion that places at the college should not be entirely based on intellectual merit.

Just a few weeks later, in February, it was proposed that the classics should no longer be compulsory after the first-year examinations for those planning to graduate in the sciences. The idea was anathema to Dodgson. Adding insult to injury, Oxford degrees were to be further degraded, he said, by instituting third class and even fourth class grades that didn't require Latin and Greek beyond the initial undergraduate entrance.

When the liberal element eventually prevailed, Dodgson went public with his protest. On March 4, a letter by him appeared in the *Morning Post*: "I much regret the necessity I feel under which the new examination statute has placed me, of resigning my present office of Public Examiner in Mathematics...[owing to] a partial surrender, and so is a step towards a total surrender of the principle, hitherto inviolate, that the Classics are an *essential* part of an Oxford education."

This example of washing the university's dirty laundry in public undoubtedly caused (as it was meant to) the dean some embarrassment. Nor would it be the last time. Although Dodgson's preferred method seems to have been anonymous squibs distributed privately in college common rooms and publicly through booksellers in Oxford, Cambridge and London, he also wrote many more letters to the press.

In February 1865, Dodgson distributed his satire "American Telegrams," which dealt with the continuing efforts of the Christ Church students (lecturers and tutors) to wrest from the dean and canons some of their decision-making power over college business. In part, the satire

concerned itself with what would eventually reach the London press and the House of Commons as the "Bread and Butter Row" over the college butler's overcharging for food and drink.

In "American Telegrams," the dean and canons are known as the Federals, and the students (tutors) as the Confederates. (Always on the wrong side of history, Dodgson was a champion of the Confederates.) The villainous "President L." was clearly Dean Liddell, and "General Grant" was Henry Grant, the Christ Church butler. The Federal Secretary of the Treasury is described as "a blot in any conceivable system of government," a direct reference to Under Treasurer Blott of Christ Church. The main complaint of the squib is that President L. has foolishly given virtual "dictatorial powers" to General Grant, and that the only solution to the conflict must be "that the Treasury shall be placed under the control of Confederates and Federals alike."

"American Telegrams" was quickly followed in March 1865 by Dodgson's "Dynamics of a Particle," which included his "New Method of Evaluation, as Applied to π " and its decade-old persecution of Benjamin Jowett; this was combined with an attack on William Ewart Gladstone, who had just lost his seat in Oxford. Gladstone's defeat was especially painful to his friend and ally Dean Liddell, who had campaigned vigorously on his behalf. Dodgson cleverly disguises these individuals, along with other prominent figures at Oxford, as coordinates in geometry. And so, for instance, proclaims by employing pseudomathematical means: "it will be found most convenient to project WEG [William Ewart Gladstone] to infinity."

The year 1865 was also when the conservative revolt of the lecturers and tutors of Christ Church satirized in the "Caucus-Race" regained momentum. Once again Dodgson was one of the prime movers in this revolt, which was ultimately resolved in the House of Commons, and required the dean to make concessions.

When the publication of *Alice's Adventures in Wonderland* (with its dedication to Alice Liddell) that year was also met with silence from the Deanery, Dodgson seems to have thrown caution to the wind, and published what might be considered an anti-reform manifesto in a sarcastic long poem entitled "The Elections to the Hebdomadal Council."

In this poem, Carroll argued that the awarding of fellowships based on intellectual achievement alone would lead to a disastrous influx of social

misfits, clever criminals, foreign infidels and ingenious villains of all stripes.

And then our Fellowships shall open be To Intellect, no meaner quality!
No moral excellence, no social fitness
Shall ever be admissible as witness.
"Avaunt, dull Virtue!" is Oxonia's cry:
"Come to arms, ingenious Villainy!"

For Classics Fellowships, an honour high,
Simonides and Co. will then apply—
Our Mathematics will to Oxford bring
The 'cutest members of the betting-ring
Law Fellowships will start upon their journeys
A myriad of unscrupulous attorneys—
While prisoners, doomed till now to toil unknown,
Shall mount the Physical Professor's throne!

.... I might go on, and trace the destiny
Of Oxford in an age which, though it be
Thus breaking with tradition, owns a new
Allegiance to the intellectual few—
(I mean, of course, the—pshaw! No matter who!*)
But, were I to pursue the boundless theme,
I fear that I should seem to you to dream.

Somehow Carroll's epidemic of criminal and moral corruption resulting from awarding fellowships nominally based on intellectual merit did not materialize. Or, stated more accurately: criminal and moral corruption at Oxford remained at much the same level as before. Infidels, however, were another matter. It took another six years—and the passage of the University Tests Act of 1871 to force the issue—but finally *Jews and other non-Christians were allowed entry into the Oxford colleges.

It is almost impossible for anyone born in the twentieth or twenty-first century to support Dodgson's view that entry into universities should be based on "moral excellence" and "social fitness" rather than intellectual achievement. However, his argument must be seen in the context of a time when universities were moving slowly from a system designed to uphold the status quo of the ruling class to one that industry and empire required be more open, with highly educated graduates and fields of study expanded to include the practical sciences and engineering.

In the years following the publication of *Wonderland*, Carroll became more and more publicly allied to conservative forces at Christ Church. Certainly he seems to have convinced himself that his opposition to the dean was a matter of conservative principle and moral rectitude. However, as time passes, it becomes increasingly clear there was a deeper and irrational reason for his actions against the dean and his wife. Certainly, over the years, Dodgson became increasingly bitter about his loss of the original Alice. Near the end of 1867, he wrote a letter to a child-friend named Agnes "Dolly" Argles that began, "I have a message for you from a friend of mine, Mr. Lewis Carroll, who is a queer sort of creature, rather too fond of talking nonsense. He told me you had once asked him to write another book like one you had read—I forget the name—I think it was about 'malice.'"

III. THROUGH THE LOOKING-GLASS AND BEYOND Six years after the publication of Alice's Adventures in Wonderland, Carroll's second masterpiece, Through the Looking-Glass, and What Alice Found There, was again dedicated to Alice Liddell. This is remarkable, given that Carroll had barely seen or spoken to his "dream child"—by then nineteen—for the better part of a decade.

Over the intervening years, the little Liddell sisters grew up in the great social swirl that was the Deanery society managed by their mother. They progressed from pretty children to society darlings. Admirers and suitors came to the Deanery and were carefully evaluated by Mrs. Liddell as potential husbands.

During these years, while Carroll attempted to find some consolation in tea parties and photographic sessions with scores of other little girls, Alice and her sisters proved to be an inspiration to others. Even before the publication of *Wonderland*, the three sisters sat for a painting by one of Britain's most sought after portrait artists, William Blake Richmond.

As they matured into young ladies, the sisters became models and muses for a number of other photographers and artists. Among them was the already mentioned photographer Julia Margaret Cameron, who besides portraying Alice in the various forms of the Great Goddess, also photographed her as the teenage Saint Agnes and the virtuous Lady Enid from Tennyson's *Idylls of a King*. On another occasion, Cameron created a tableau with all three Liddell sisters appearing as the three daughters of Shakespeare's *King Lear*.

All three sisters also sat for the most prestigious photographer of the Victorian age, Alexander Bassano, the official portrait photographer of Queen Victoria and the Prince of Wales. Always well placed at the centre of high society, the sisters continued throughout their lives to attract the attention of artists. And in the case of Edith the Wonderland Eaglet, this continued even after her early death at the age of twenty-two, when her likeness was used by the Pre-Raphaelite artists Edward Burne-Jones and William Morris for their stained glass portrait of St. Catherine in the Chapel of Remembrance in Christ Church Cathedral.



The Liddell sisters in an engraving after a painting by William Blake Richmond...



...and as photographed by Alexander Bassano...



...and posing as Lear's daughters for Julia Margaret Cameron.



Edith Liddell as St. Catherine.

Just after the publication of *Through the Looking-Glass*, released in December 1871 (but dated 1872), Carroll's attitude toward Dean Liddell and his wife deteriorated from unpleasant to abusive. There is little doubt that his emotional motives were largely hidden from himself, but his attacks on the dean and his wife after 1871 progress from the covert (as in their portrayal as the King and Queen of Hearts) to the public and vicious in frequent anonymous pamphlets, many of them amounting to character assassinations.

The timing is significant. By the summer of 1872, Alice was twenty, and she and her sisters Lorina and Edith had just returned from their Grand Tour of Europe. It would not have helped that Carroll's younger brother Wilfred had just wed his own teenaged sweetheart, Alice Donkin, who was now twenty-one. The most provocative circumstance for Carroll, though, was undoubtedly the fact that Queen Victoria's youngest son, Prince Leopold, had become romantically linked with Alice Liddell.

As his brother, the Prince of Wales, had done before him, Prince Leopold attended Christ Church. He had become an undergraduate student of Robinson Duckworth (the Wonderland Duck), and his mentor was Dean Liddell. As such he went often to the Deanery, where he and Alice were frequently seen in each other's company. As Carroll's biographer Martin Cohen remarks, "When the Prince and Alice appeared to be more than friends, Charles launched his most virulent attacks upon the Dean and, indeed, upon Mrs. Liddell's 'kingfisher' activities."

Cohen's reference to Carroll's "unbridled vitriol" levelled at Mrs. Liddell relates to his 1873 publication of *The Vision of the Three T's*, a very public assault on the entire family, but most especially on Mrs. Liddell. *The Vision* was—in part—cast as a parody of Izaak Walton's *Compleat Angler* in which Carroll characterized Mrs. Liddell's social-climbing ambition to marry her daughters off to ever-higher levels of society as that of a "King-fisher" who single-mindedly hunted for "Gold-fish"—that is, aristocrats or royalty—to feed to her young.

Though Carroll was not alone in this sort of observation of Mrs. Liddell, in such a class-conscious society it was presumed to be every mother's duty to attempt to marry her daughters off to gentlemen of a higher social standing. It was common knowledge that this was how Mrs. Liddell herself had found her place in society. The novelist and old school friend of the dean William Makepeace Thackeray was much surprised to hear of the match and wrote: "Dear brave old Liddell!...has taken a 3rd rate provincial lady (rather first rate in the beauty line, though, I think) for a wife." Still, gossip was one thing; publication was quite another.

The real problem for Carroll was that Mrs. Liddell and he were too much alike. As we have seen, Carroll was a relentless "lion hunter" of the rich and famous. He too was a third-rate provincial who was equally ambitious as a social climber and stalker of celebrities, aristocrats and royalty. And he was as dismissive as her of those he considered socially inferior.

In 1874, Carroll published "The Blank Cheque," another virulent attack on Mrs. Liddell. Again the timing was significant: it was three days before Alice's older sister, Lorina, wed William Baillie Skene, whose family was descended from thirteenth-century barons of Skene Castle. In "The Blank Cheque," Mrs. Liddell appears as an overbearing, vain and stupid wife of a vague, absent-minded and dim dean. She is called Mrs. Nivers—that is, someone who believes herself to be the centre of the "uNIVERS-ity."

In the incompetent hands of Mrs. Nivers, the university rapidly

descends into hopeless debt and falls apart. Carroll himself appears as Mr. De Ciel—or D. C. L., a scrambling of Charles Lutwidge Dodgson's initials—the only reasonable and sensible person in a cast that includes three silly schoolboys: Benjy (Benjamin Jowett), Arthur (Arthur Penrhyn Stanley) and Harry-Parry (Henry Parry Liddon). There is also Pussy, "the much-enduring parlour-cat" (Edward Bouverie Pusey) and Susan the maid (Mary Prickett, Alice's governess).

Carroll self-published "The Blank Cheque" and a dozen other satiric pamphlets of this sort over the years. Many of the more notorious ones were quoted in undergraduate publications and not infrequently in popular magazines and the national press.

If the attacks seem today obscure, they certainly were not at the time in Oxford. The tolerance of the dean and his wife is rather remarkable. The almost hysterical vitriol Dodgson aimed at the Liddells in these squibs undoubtedly caused tongues to wag and exaggerate the nature of his relationship with Alice even further.

Certainly, no one saw Dodgson's pamphlets as harmless lampooning. Oxford's great philologist, the German Max Müller, wrote about the attacks with some embarrassment: "Nasty things were said and written, but everybody knew from what forge those arrows came." Even Dodgson's friend the chancellor of the university, Lord Robert Cecil the Marquess of Salisbury, commented on the unsavoury nature of the pamphlets: "Some say that Dodgson has lost his mind because of rejection of Alice's hand in marriage. It certainly seems like it."

In Oxford academic circles—even among undergraduates—Lewis Carroll's feud with the dean and Mrs. Liddell had taken on such legendary status that in 1874, it resulted in an outright scandal. That year, the dean decided he could no longer tolerate the situation when an undergraduate published an anonymous lampoon entitled "Cakeless." This was the last straw for the normally tolerant man. Attacks on the dean's policies and politics were one thing, but this nasty attack on the morals and character of his wife and daughters could not be ignored—all the more so since all the material had obviously been lifted from Dodgson's many pamphlets.

"Cakeless" is comic verse drama in which the Liddell family appear in Greek costume: Dean and Mrs. Liddell as Apollo and Diana, and Alice, Lorina and Edith as their three betrothed daughters. The occasion is a joyous triple wedding of the three beauties, but in the midst of the ceremony a "cursed fiend" appears and screams out, "I do protest against this match, so let me speak."

Apollo (the dean) immediately recognizes the "cursed fiend" as his all too familiar gadfly adversary: "My foeman Kraftsohn." The dodgy Kraftsohn is, in fact, Charles Dodgson, the mathematics don who is "biting his nails" in wrath and swears geometric oaths: "By circles, segments, and by radii, / Than yield to these I'd liefer far to die."

The enraged Apollo points out Kraftsohn to an army of scouts and demands they drive him from the scene: "Strip, strip him, scouts! This is the knave we seek." Later, to make sure no one can mistake Kraftsohn's true identity, Apollo suggests his scouts "Leave him in Wonderland with some hard-hitting foe, / And through the looking-glass let him survey the blow."

Though "Cakeless" is written in the same style as a couple of Lewis Carroll's pamphlets, his unflattering portrayal makes it unlikely that he was directly involved in producing it. What is certain is that most of the ammunition used against the Liddells was gleaned from a decade's worth of Carroll's lampoons. "Cakeless" is practically an index to all of Dodgson's abusive pamphlets.

It certainly mirrors Carroll's characterization of Mrs. Liddell as a "King-fisher" who hunts "Gold-fish" aristocrats to marry off her daughters to. In "Cakeless," the three wealthy bridegrooms are clearly identifiable as Prince Leopold, Lord Brooke and Aubrey Harcourt, who were all romantically linked to the three Liddell sisters.

Finally imprisoned in a belfry, the still vengeful Kraftsohn fumes like Milton's Satan in his chains:

My fate is sealed; my race is run, My pilgrimage is well nigh done Farewell to pamphlets and to angles round! I seek a shore where Euclid is not found.

Dean Liddell ordered all copies of the pamphlet seized and suppressed. Then he had the undergraduate author unmasked and brought to his chambers. The luckless student, John Howe Jenkins, was informed that he was to be sent down.

Remarkably, the "Cakeless" scandal did nothing to silence Dodgson. In fact, he seemed to thrive on his notoriety as the Oxford gadfly. Far from being the shy, retiring don that he is commonly believed to have been, he was in fact one of Oxford's most contentious figures throughout his tenure at Christ Church—and a constant thorn in the side of the dean.

Indeed, in the wake of the "Cakeless" scandal, he decided the moment was right to publish *College Rhymes* and *Notes by an Oxford Chiel*. This was a collection of most of his most notorious squibs and satires lampooning the Liddells. This was followed later that year by the publication of letters in the *Pall Mall Gazette* attacking the dean's programs.

The year 1876 marked the beginning of a new romance for Alice Liddell. Her beau this time was another Christ Church undergraduate, Reginald Gervis Hargreaves, the only son of a wealthy mill owner and Lancashire property magnate. He was exactly Alice's age and was everything Dodgson was not: a youthful, athletic cricketer and a member of the hunting and shooting set with a country estate in the New Forest. He was also academically unremarkable and absolutely hated Latin and Greek.

This was the year of the publication of *The Hunting of the Snark*, Lewis Carroll's last true literary masterpiece. Significantly, this book is dedicated not to Alice Liddell but to a different child-friend and muse, Gertrude Chataway.

Midsummer that year was initially a time of celebration for the Liddells. Alice's younger sister Edith (the Eaglet) was engaged in June to Aubrey Harcourt, the grandson of the Earl of Sheffield and nephew of Liberal home secretary and chancellor of the exchequer Edward William Harcourt. Coincidentally, Aubrey was heir to the Nuneham estate where a decade before the sisters frequently picnicked with Carroll on their boating expeditions. Plans for the wedding ended thirteen days later, when Edith died suddenly from a combination of measles and peritonitis. This was a terrible blow to all the Liddell family, but especially to Mrs. Liddell and to Alice, who had always been a close confidante of her younger sister. Dodgson mentions the event in his diaries by referring to the passing of "my old friend Edith Liddell." He also mentions—seemingly sympathetically—that the grieving Mrs.

Liddell came to his rooms to gather a few photographs of Edith from his collection.

Extraordinarily, though, less than one month after Edith's death, Dodgson seems to have had no mercy for her grieving father. In July of 1876, he published the poem "Fame's Penny Trumpet," which was an almost hysterical attack on Dean Liddell's program for financing original research at the university. Dodgson held the dilettante's view that it was despicable and ungentlemanly to accept endowments and funds to conduct and reward research. Once again employing the Liddell/little pun, he attacks the "little men" by describing them as "Ye little men of little souls!...Gold-sucking leeches...[with] swinish appetite!" and "the vermin that beset [Wisdom's] path!"

In Morton Cohen's opinion: "So intemperate was the verse that the *Pall Mall Gazette*, *Punch*, and *World* would not print it." Nonetheless, the undaunted Carroll had the diatribe printed and distributed himself.



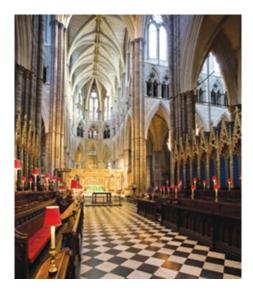
Over the next four years, Dodgson attacked in print a wide variety of university programs and policies, such as the statistical analysis of examination marks. He also publicly opposed the financing of Max Müller's professorship of comparative literature and argued against awarding M.A. degrees in natural science.

Much to the embarrassment of the dean and the university, he often

voiced his many objections through letters to national newspapers. Although his letters covered a wide range of subjects and complaints, one issue became his most frequently ridden hobby horse. Dodgson believed it to be his duty "to rouse an interest, beyond the limits of Oxford, in preserving classics as an essential feature of a University education." Sadly for him, the interest of the nation was not roused, and nor did the nation share his horror at the notion that "the destinies of Oxford may some day be in the hands of those who have had no education other than 'scientific.'"



Alice Liddell, circa 1880: Leaving Wonderland behind.



The venue for the wedding: Dodgson was not invited.

IV. LAST YEARS On September 15, 1880, Alice Pleasance Liddell married Reginald Gervis Hargreaves with much pomp and ceremony in Westminster Abbey where she had been baptised twenty-eight years earlier. The presiding minister at the wedding was the Liddells' old family friend the dean of Westminster, Arthur Penrhyn Stanley, the leading liberal Churchman of the time. In attendance were many prominent members of church and state, as well as royalty in the person of Prince Leopold the Duke of Albany who carried congratulatory messages from the Queen and the Prince of Wales. Charles Dodgson was not among those invited.

Alice and Reginald Hargreaves moved into Cuffnells, the Hargreaves family estate in the New Forest. Alice became a celebrated society hostess, while her husband played cricket for Hampshire and served as a magistrate. Like her mother before her, Alice sought out the cream of society for their soirees, balls and shooting parties on their estate. It was a life that could hardly be further removed from that lived by the Reverend Charles Dodgson.

Some fifteen months after her grand wedding, Alice produced the first of three sons, Alan Knyveton. Fifteen months later, she gave birth to Leopold Reginald "Rex," and later still to Caryl Liddell. The second son was named after his godfather, Prince Leopold, who through the Queen's arrangements in 1882 had married Princess Helena Frederica Augusta of

Waldeck-Pyrmont. Sadly, just two years later, the Prince—who suffered from hemophilia and epilepsy—died as a result of a fall, leaving behind two very young children: a prince and a princess—who was named Alice.

The months following Alice Liddell's wedding proved to be a turning point in Charles Dodgson's life as well. Although continuing with his tea parties and visits with scores of child-friends, he suddenly and completely gave up his practice of photography. Now aged forty-nine, he also decided to dispense with his teaching duties at Christ Church and submitted his letter of resignation to the dean.

Dodgson never had any undergraduate following, and indeed appears to have rather despised popular tutors like Benjamin Jowett. Although he enjoyed teaching children (especially pre-adolescent girls), he seems to have avoided forming or maintaining friendships with adult pupils. And despite his notoriety among undergraduates as a pamphleteer and satirist, his students did not find his classes to be in the least entertaining. One student, H.F. Howard, described his lectures as humourless and "unspeakably dull"; while A.S. Russell (who became a Christ Church tutor) claimed one group of students actually petitioned to be transferred to another instructor.

Nonetheless, Dodgson appears to have taken his duties as a lecturer seriously, and in his diary for 1881 he reflects sadly that while his first lecture in 1856 was attended by a class of twelve undergraduates, his last attracted only two out of nine.



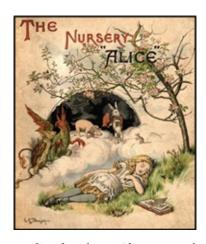
The Chestnuts, Guildford: Dodgson family residence.

Unfortunately for Dean Liddell, Dodgson's resignation from his teaching duties did not end his activities at the university. Indeed, as among the last given tenure under the old system of privilege and favour, Dodgson was entitled to retain, for the rest of his life, his

residency, including free board and common-room membership, in one of the most desirable suites of rooms in Christ Church's great quadrangle.

Dodgson expressed his desire to dedicate the rest of his life to his writing, and Dean Liddell would no doubt have been delighted if Dodgson had indeed limited himself to his writing, hobbies and picnics. But Dodgson's resignation from his teaching duties gave him much more free time to sit on committees, where he must have driven the dean to despair. Dodgson fought with Liddell over every issue, from college appointments to the dean's wish to provide college servants with Christmas presents.

In the 1880s, his popularity as the author of the Alice books grew exponentially, and internationally, so much so that he busied himself with marketing *Wonderland* stamp cases, puzzles, games and biscuit tins. There was also an 1886 Christmas stage production of *Alice in Wonderland* at the Prince of Wales Theatre in London; an *Alice's Adventures Under Ground* facsimile edition of the handwritten manuscript (1886) and a simplified, colour illustrated *The Nursery "Alice"* for children "nought to five" (1889).



Spinoff: An Alice for those "from nought to five."





A new audience: Alice on stage.

He worked equally hard on a considerable number of publications stemming from his study of mathematics and logic. Among them, in 1887 he published his *Curiosa Mathematica* and *Game of Logic*. He also made a special study of the mathematical probabilities of voting systems.

Furthermore, he was constantly writing letters to the national and local press, the prime minister and various committees and dignitaries on a multitude of issues: university education, public schools, national politics, economics, organization of charities, vivisection and public morals.

His chief creative work of this period was a novel in two parts: *Sylvie* and *Bruno* (1889) and *Sylvie* and *Bruno* Concluded (1893). These two

volumes are interesting primarily because they give Carrollian scholars insights into the author and the ideas and issues that most concerned him. As novels, however, they are failures of disastrous proportions and did a great deal to diminish his literary reputation among critics and even his most enthusiastic fans.





No good as novels: Carroll's chief creative work of this period.

Somewhat disappointed by the reception of the Sylvie and Bruno books, Dodgson was nonetheless buoyed up by the continued popularity and ever-expanding sales of the Alice books. He also became more and more focused on what he considered his most important contribution to education, his book on logic. After more than a decade of labour, he published *Symbolic Logic: Part I, Elementary* in 1896. He fully intended to finish *Part II, Advanced* over the next year or so. However, despite the long working hours he put into the project, it never saw publication during his lifetime.

Now in his mid-sixties, the Reverend Charles Dodgson appeared to be in vigorous good health. He was famous for working at a standing desk during marathon sessions that frequently extended into the early hours of the morning, and he was often sighted—black coattails flapping—on

rapid-paced twenty-mile walks through the Oxford countryside.

In the summer of 1897, Carroll proudly commented on "the splendid health I have had, unbroken, for the last year and a half, and the working powers that are fully as great as, if not greater, than I have ever had." And in September that year, he wrote to a sister saying that he enjoyed (without tiring in the least) his brisk biweekly eighteen-mile walks between his holiday residence in Eastbourne and Hastings.

And yet suddenly, on January 14, 1898—thirteen days short of his sixty-sixth birthday—Charles Dodgson was dead. He had suffered cold and flu symptoms after spending Christmas with his sisters in Guildford, and shortly thereafter contracted a fatal bronchial infection.

Morton Cohen has pointed out that while appearing generally fit, Dodgson had had some bronchial trouble over the last decade of his life, and this may have been due to the "miasmal river climate of Oxford." However, he also offers a very convincing suggestion that Carroll's condition may have resulted from his enthusiasm for acquiring the latest gadgets and appliances.

Always an early adopter, Dodgson was one of the first to acquire asbestos gas fires. He had them installed in his bedrooms in Christ Church, Guildford and Eastbourne. As he boasted, not only were these fires cleaner and more efficient than coal fires, but he could keep them burning all night without attending them. As the dangers of asbestos were not understood until the second half of the twentieth century, Dodgson could not have known the damage he was undoubtedly inflicting on his lungs for more than a decade by breathing in asbestos particles in a closed room throughout the night.





Dodgson and the dean: Rivals died within days of each other.

Four days after Dodgson's death, his old adversary, Henry George Liddell, also passed away. On January 23, 1898, Liddell's successor as dean, Francis Paget, preached a sermon in Christ Church Cathedral honouring the memory of both men. The irony would not have been lost on the congregation. Within the limits of formally polite but often poisonous Oxford academic society, the pair's animosity had been obvious and mutual. Dodgson was excluded from many social occasions at the Deanery. And in later years, Mrs. Liddell confiscated all the letters, stories, puzzles and games that Dodgson had sent to her children and destroyed them.

Most telling of all, years later, when Lewis Carroll was famous throughout the empire, Mrs. Liddell commissioned and oversaw her husband's posthumous biography, in which not one reference to Charles Dodgson or Lewis Carroll is made. This despite the fact that the two men had a fifty-year working relationship, and the dean's daughter was famously acknowledged throughout the English-speaking world as the original Alice in Wonderland.

One final irony may be gleaned by anyone visiting Christ Church's great dining hall, around which are hung the portraits of the great and the good of the college over the centuries. There upon the walls may be found the portraits of both Dean Henry George Liddell and his old nemesis the Reverend Charles Lutwidge Dodgson.

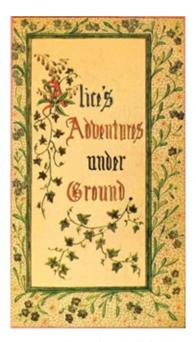
So ends the tale of Charles Dodgson. But what do we know of the fate of the real Alice, now Mrs. Alice Hargreaves, through the last years of the Victorian age?

Alice continued to live the life of a wealthy socialite at Cuffnells, but by the 1890s revenues were diminishing for many of the country's landed gentry owing to falling agricultural prices. And during the Edwardian period, increases in income and inheritance taxes began the decline in the fortunes of the nation's grand estates. The Hargreaveses suffered no real hardships, but like many of their class, they began to slowly sell off their land holdings. First to go was the family's northern Lancashire estate, its grand house, its park and finally its outlying farms.

None of this seemed to impinge on the high-society life of Alice and her family. However, then came the holocaust of the Great War that

brought desolation to the lives and fortunes of so many families of all classes. From this cataclysm, the Hargreaves were not exempt. By the end of the conflict, their two eldest sons lay among the dead, and Alice and her husband's lives were forever after darkened by that terrible loss.

In 1926, a rather broken and nearly financially ruined Reginald died, aged seventy-three. His only surviving son, Caryl, inherited Cuffnells, but there was not sufficient money to maintain the estate as well as his London apartments. Despite this financial crisis, Caryl was unwilling to give up his fashionable society lifestyle in London, and he largely left it up to his elderly mother to deal with matters as best she could, alone at Cuffnells.



The original Alice: Its inspiration was forced to sell her hand-drawn, handwritten copy.

No longer a wealthy society hostess, Alice Hargreaves believed she had only one viable asset remaining: her collection of gifts from Lewis Carroll, including first editions inscribed by him. These included the beautiful hand-drawn, handwritten green-leather-bound booklet that was Carroll's original *Alice's Adventures Under Ground*.

Its offering at a Sotheby's auction on April 3, 1928 caused a sensation as pre-emptive offers of four to ten thousand pounds were refused, and even the British Museum's limit of twelve thousand pounds was exceeded. The final bid was £15,400, an enormous sum. At the same

time, Virginia Woolf was about to publish *A Room of One's Own*, in which she cites an annual income of five hundred pounds as sufficient to make a woman of some social standing financially independent. The sale price was four times Sotheby's estimate and broke all records as the highest price ever paid for a book in Britain; in today's currency it would be equivalent to well over a million U.S. dollars.

However, sensation in the press soon turned to outrage when it was discovered that the purchaser was an American book dealer and that this literary treasure would be forever lost to the nation when taken away to the United States.

Had Lewis Carroll posthumously come to the rescue of his little heroine Alice and saved her family home? Unfortunately not. The money should have been sufficient to provide mother and son with a good living income. Also, Alice had hoped that it would cover the inheritance tax on the estate, so Caryl might retain Cuffnells after her death. But Caryl—as was so often said of the careless young men of his class—was "not good with money." Within two years, through ill-advised investments, he had lost the entire fortune acquired through the Sotheby's auction. The aging Alice Hargreaves was back in the ever more financially precarious Cuffnells, alone, and more isolated than ever.

And yet, absurdly, all was not entirely lost. After the 1928 Sotheby's sale, *Alice's Adventures Under Ground* (along with two first editions of *Alice's Adventures in Wonderland*) had been resold for \$150,000 (equivalent to roughly two million dollars in today's currency) to Eldridge Johnson, president of the Victor Talking Machine Company (later RCA Victor).

In 1932, a massive exhibition was mounted in New York to mark Lewis Carroll's centenary. The exhibition's prize display was Eldridge Johnson's *Alice's Adventures Under Ground*, while the president of Columbia University decided to top off the celebrations by inviting the real Alice to Manhattan. She travelled to New York at the university's expense in the company of her sister Rhoda and her son Caryl.



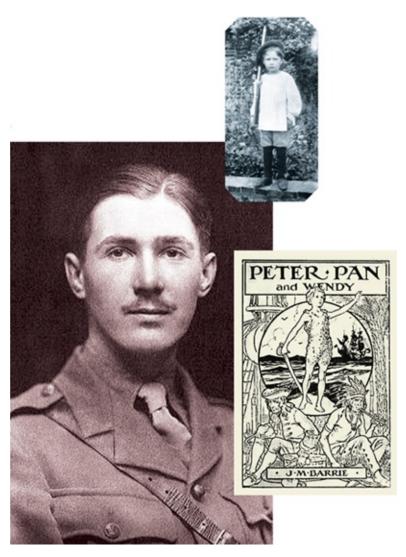
Honoured in New York: Alice with Columbia president Nicholas Murray Butler.

Alice Hargreaves was greeted in New York as a great celebrity. The eighty-year-old was met at the port by newspapermen, film crews and a police escort that paraded her though the streets of Manhattan and into a grand suite in the Waldorf-Astoria. She appeared in the press throughout North America and in a Paramount newsreel in the nation's movie houses, and addressed the American people on the radio and by means of a well-paid exclusive interview in *The New York Times*.

It is difficult to know whether Charles Dodgson would have been delighted or outraged when Alice Liddell was presented with an honorary doctorate of letters from Columbia University.

A somewhat less flamboyant centenary exhibition of Carrollian paraphernalia was held in Britain on June 26, 1932. The Bumpus Bookshop ("Booksellers to His Majesty the King") of Oxford Street, London, was filled to overflowing with those wishing to catch sight of "the real Alice." The event was attended by a considerable number of literary luminaries, including J. B. Priestley and Virginia and Leonard Woolf. Also in attendance was J. M. Barrie's adopted son, Peter Llewelyn Davies, the inspiration for Peter Pan. He and Alice were introduced, but sadly, we have no record of what conversation passed between these muses for the creation of two of the most celebrated characters in children's literature.

Although Mrs. Hargreaves in old age occasionally claimed to have tired of being Alice, these celebrations had made her once again the popular princess she had been in her youth at the Christ Church Deanery, and it must have given her some pleasure, as Carroll had hoped, in "remembering her own child-life, and the happy summer days." Also, she could no longer claim to suffer from isolation and loneliness. These last years had brought her worldwide celebrity, with letters and well-wishes pouring in from all parts of the world. She died peacefully at the age of eighty-two, on November 16, 1934.



Man and boy: Peter Llewelyn Davies, the inspiration for Peter Pan.



Down another rabbit-hole: A Rosicrucian engraving, 1785.

* In the twentieth century, JRR Tolkien appears to have been aware of the historic significance of Radcliffe Camera. In one of his more obscure early works, *The Notion Papers*, Tolkien's description of Radcliffe Camera suggests it was the architectural model for his satanic temple of Morgoth the Dark Enemy in *The Silmarillion*. One might suspect the motivation for this portrayal was Tolkien's devout Catholicism, and the view that Radcliffe Camera was symbolic of the

influence of Freemasons on Oxford.

** Christ Church's great quadrangle fountain with its Giovanni da Bologna bronze of Mercury was installed by John Radcliffe in the seventeenth century around the time of the construction of Sir Christopher Wren's Great Tom Tower gate. In 1820, the statue of Mercury was pulled down and destroyed as an undergraduate prank by the young Lord Stanley (the future Prime Minister, the Earl of Derby). Only Mercury's head survived and was kept in the Christ Church Library (where Lewis Carroll was sub-librarian.) It was not until 1928 that a lead copy replaced the original statue of Mercury in the fountain. The fountain was frequently the scene of undergraduate hazings between various college factions. Just such an incident is suggested in Evelyn Waugh's *Brideshead Revisited* (1945) when the "aesthete" student Anthony Blanche has a gang of students threatening to "put Anthony in Mercury."

Bibliography Acknowledgements Image Credits

Bibliography

Abeles, Francine F. *Mathematical Pamphlets of Charles Lutwidge Dodgson and Related Pieces*. Charlottesville: University of Virginia Press / Lewis Carroll Society of North America, 1994.

Abeles, Francine F. *Political Pamphlets of Charles Lutwidge Dodgson and Related Pieces*.

Charlottesville: University of Virginia Press / Lewis Carroll Society of North America, 2001.

Abeles, Francine F. *Logic Pamphlets of Lewis Carroll and Related Pieces*. Charlottesville: University of Virginia Press / Lewis Carroll Society of North America, 2010.

Ackerman, Sherry. *Behind the Looking Glass: Reflections on the Myth of Lewis Carroll.* Cambridge: Cambridge Scholars Publications, 2008.

Ayres, Harry Morgan. Carroll's Alice. New York: Columbia University Press, 1932.

Bakewell, Michael. Lewis Carroll: A Biography. London: Heinemann, 1996.

Bartley III, William Warren. *Lewis Carroll's Symbolic Logic, Part I and Part II*. Hassocks, Sussex: Harvester Press, 1977.

Batey, Mavis. Alice's Adventures in Oxford. Oxford: Pitkin Guides, 1980.

Bill, E.G.W., and Mason, J.F.A. *Christ Church and Reform, 1850–1867.* Oxford: Oxford University Press, 1982.

Black, Duncan. A Mathematical Approach to Proportional Representation: Duncan Black on Lewis Carroll. Boston: Kluwer Academic Publishers, 1996.

Bowman, Isa. *The Story of Lewis Carroll Told for Young People by the Real Alice in Wonderland*. London: J.H. Dent, 1899.

Clark, Ann. Lewis Carroll: A Biography. London: Dent, 1979.

Clark, Ann. The Real Alice: Lewis Carroll's Dream Child. London: Michael Joseph, 1981.

Cohen, Morton N., ed. The Selected Letters of Lewis Carroll. London: Macmillan, 1982.

Cohen, Morton N., ed. Lewis Carroll: Interviews and Recollections. Iowa: University of Iowa, 1989.

Cohen, Morton N., ed. The Letters of Lewis Carroll. London: Macmillan, 1979.

Cohen, Morton N., ed. Lewis Carroll: A Biography. London: Macmillan, 1995.

Cohen, Morton N. Reflections in a Looking Glass: A Centennial Celebration of Lewis Carroll, Photographer. New York: Aperture Press, 1998.

Collingwood, Stuart Dodgson. *The Life and Letters of Lewis Carroll*. London: T. Fisher Unwin, 1898.

Debenham, Frank. Navigation With Alice. London: Hodder & Stoughton, 1961.

Edens, Cooper, ed. Alice's Adventures in Wonderland: A Classics Illustrated Edition. San Francisco:

Chronicle Books, 2010.

Gardiner, Martin. The Annotated Alice. New York: Clarkson N. Potter Inc., 1960.

Gardiner, Martin. More Annotated Alice. New York: Random House, 1990.

Gardiner, Martin. The Universe in a Handkerchief: Lewis Carroll's Mathematical Recreations, Games, Puzzles and Word Plays. New York: Copernicus, 1996.

Gardiner, Martin. The Annotated Alice: the Definitive Edition. New York: W.W. Norton & Co., 2000.

Gersheim, Helme. Lewis Carroll, Photographer. London: Max Parrish, 1949.

Green, Roger Lancelyn. The Story of Lewis Carroll. London: Methuen & Co., 1949.

Green, Roger Lancelyn, ed. The Diaries of Lewis Carroll. London: Cassell, 1953.

Green, Roger Lancelyn. Lewis Carroll. London: Bodley Head, 1960.

Green, Roger Lancelyn, ed. The Works of Lewis Carroll. London: Paul Hamlyn, 1965.

Guiliano, Edward, and Kincaid, James R., eds. *Soaring with the Dodo: Essays on Lewis Carroll's Life and Art.* Lewis Carroll Society of North America, 1982.

Heath, Peter. The Philosopher's Alice. New York: St Martin's Press, 1982.

Hofstadter, Douglas R. Gödel, Escher, Bach: An Eternal Golden Braid. New York: Basic Books, 1979.

Hudson, Derek. Lewis Carroll: An Illustrated Biography. London: Constable, 1954.

Jones, Jo Elwyn, and Gladstone, Francis. *The Red King's Dream or Lewis Carroll in Wonderland*. London: Pimlico, 1995.

Leach, Karoline. In the Shadow of the Dream Child: A New Understanding of Lewis Carroll. London: Peter Owen, 1999.

Lennon, Florence Becker. Victoria Through the Looking Glass. London: Cassell, 1945.

Lovett, Charlie. Lewis Carroll Among His Books. Jefferson, NC: McFarland and Co., 2005.

Nagel, Ernest. The World of Mathematics Vol 3. XIII, "Symbolic Notation, Haddocks' Eyes and the Dog-Walking Ordinance." New York: Simon & Shuster, 1956.

Patten, Bernard M. The Logic of Alice: Clear Thinking in Wonderland. New York: Prometheus, 2009.

Pycior, Helena M. Victorian Studies 28.1, "At the Intersection of Mathematics and Humour: Lewis Carroll's 'Alices' and Symbolic Algebra." Bloomington: Indiana University Press, 1984.

Reed, Langford. The Life of Lewis Carroll. London: W. and G. Foyle Ltd., 1932.

Sewell, Elizabeth. The Field of Nonsense. London: Chatto and Windus, 1952.

Stoffel, Stephanie Lovett. Lewis Carroll and Alice. London: Thames and Hudson, 1997.

Taylor, Alexander. The White Knight. Edinburgh: Oliver and Boyd, 1952.

Taylor, Roger, and Wakeling, Edward. *Lewis Carroll: Photographer*. Princeton: Princeton University Press, 2003.

Thomas, Donald. Lewis Carroll: A Portrait With Background. London: John Murray, 1998.

Wakeling, Edward, ed. Lewis Carroll's Diaries, the Private Journals of Charles Lutwidge Dodgson:

- Volumes 1-10. Southsea: Lewis Carroll Society, 1993–2007.
- Wakeling, Edward, ed. *Oxford Pamphlets, Leaflets and Circulars of Charles Dodgson*. Southsea: Lewis Carroll Society, 1993.
- Williams, Sidney, and Madan, Falconer, eds. *A Handbook of the Literature of Charles L. Dodgson (Lewis Carroll)*. Oxford: Oxford University Press, 1932.
- Woollcott, Alexander. Introduction. *The Complete Works of Lewis Carroll*. London: Nonesuch Press, 1939.

Acknowledgements

Many thousands of books, articles and theses have been written about Lewis Carroll and *Alice's Adventures in Wonderland*. I cannot now even guess how many I have read over the last couple of decades. My reading in preparation for this book has also included a multitude of other Victorian poets, authors, artists, historians, mathematicians, theologians, philosophers and mystics.

There are exceptional works that must be specifically acknowledged.

All Carrollian biographers and scholars rely heavily on the work of Dodgson's nephew Stuart Dodgson Collingwood in his *The Life and Letters of Lewis Carroll*, published in 1898.

Four substantial biographies were published in the mid-twentieth century: Roger Lancelyn Green's *The Story of Lewis Carroll* (1949), Florence Becker Lennon's *Victoria Through the Looking Glass* (1945), Alexander Taylor's *The White Knight* (1952) and Derek Hudson's *Lewis Carroll* (1954). Three other notable biographies appeared in the 1990s: Jo Elwyn Jones and Francis Gladstone's *The Red King's Dream* (1995), Michael Bakewell's *Lewis Carroll: A Biography* (1996) and Donald Thomas's *Lewis Carroll: A Portrait With Background* (1998). Although I have taken a quite different approach, all of these works have to some degree informed and influenced the writing of this book.

The gold standard for Carrollian scholarship was set by Morton Cohen in his meticulously researched *Lewis Carroll: A Biography* in 1995. It is a work of great depth and provides important insights into the historic context of Charles Dodgson and his writing.

Another inspiration was Martin Gardiner's *Annotated Alice* books; the first version appeared in 1960 and various manifestations continued up to the ultimate *The Annotated Alice: The Definitive Edition* in 2000. The perpetual popularity of his *Alice* has inspired a veritable industry of annotated books. I am also indebted to Douglas R. Hofstadter's *Godel, Escher, Bach: an Eternal Golden Braid—a metaphorical fugue on minds and machines in the spirit of Lewis Carroll* for the insights provided by his extraordinary deconstruction of Carroll's logical paradox "What the Tortoise Said to Achilles."

Beyond his creative writing, essays and mathematical works, two other primary and indispensable sources of insight into the mind of Lewis Carroll were provided by his diaries and letters. A selection of *The Diaries of Lewis Carroll* were edited and published by Roger Lancelyn Green in 1949, and *The Letters of Lewis Carroll* were edited and published by Morton Cohen in 1979. Then between 1993 and 2007, the tireless Carrollian scholar Edward Wakeling edited all surviving diaries, published as Lewis Carroll's *Diaries*, *The Private Journals of Charles Lutwidge Dodgson*, in ten volumes. Also, further insights were provided by Charlie Lovett's heroic effort to recreate Carroll's personal library with his *Lewis Carroll Among His Books* (2005).

For rather specialized insights into nineteenth century mathematics and logic, I am thankful for the scholarly reconstructions of Lewis Carroll's *Symbolic Logic*, *Part I and Part II* (1977) by William Warren Bartley III, and *A Mathematical Approach to Proportional Representation: Duncan Black on Lewis Carroll* (1996). Also, I am most indebted to Francine F. Abeles, Professor Emerita of Mathematics and Computer Science, Kean University, New Jersey, not only for her *Mathematical Pamphlets of Lewis Carroll and Related Pieces* (1994) and *Logic Pamphlets of Charles Lutwidge Dodgson and Related Pieces* (2010), but also for her careful reading of my text in chapter 12 and specifically her advice and encouragement related to Boolean logic in my interpretation of the trial of the Knave of Hearts, as well as my resolution of the "Riddle of the Hatter's Hat."

For equally specialized insights into political and academic life in nineteenth century Oxford, I am thankful for the scholarship of E.G.W. Bill and J.F.A. Mason's *Christ Church and Reform, 1850-1867* (1982) and Edward Wakeling's *Oxford Pamphlets, Leaflets and Circulars of Charles Dodgson* (1993); as well as Francine Abeles' *Political Pamphlets of Charles Lutwidge Dodgson and Related Pieces* (2001).

Too numerous to name are the many contributors to the Lewis Carroll Society's publications: *The Carrollian* (formerly *Jabberwocky*) scholarly journal, *Lewis Carroll Review* and the *Bandersnatch* newsletter. Also, there are the contributors of the Lewis Carroll Society of North America's publications: *Knight Letter*, *Rectory Umbrella*, and its *Far-flung Knight* blog. Special thanks are due to *Knight Letter* editor Mahendra Singh and Dayna Nuhn of the Lewis Carroll Society of Canada.

I am indebted to the British Library (King's Cross), London Library (St. James Square), Wellcome Library (Euston Square), Toronto Reference Library, Toronto's Lillian H. Smith Library and the Osborne Collection of Early Childhood Books librarian Leslie McGrath and the University of Toronto Libraries: particularly the Thomas Fisher Rare Book Library (Joseph Brabant Collection) librarians Anne Dondertman, Deborah Whiteman, John Shoesmith, Paul Armstrong, Jason Brown, Jennifer Toews and Tom Reid. Also Victoria University (Toronto) E.J. Pratt Library's librarians: Lisa Sherlock, Agatha Barc, Alison Girling and Roma Kali.

I am most grateful to Brad Martin, CEO Penguin Random House Canada for turning a chance encounter into a commitment to publish, and to vice-president and creative director Scott Richardson for his inspired design. Most especially, I must acknowledge that whatever integrity and coherence this book possesses is in no small part due to the patience and persistence of its insightful editor, Tim Rostron.

I also wish to thank at Doubleday Canada associate editors Zoe Maslow and Kiara Kent, managing editor Susan Burns, and production manager Carla Kean. Researchers Loribeth Gregg, Carly McMillan, Peter Phillips and Melanie Tutino did more than assist; they made the book possible.

A grateful acknowledgment is also due to Terry, Alison, Sally and Bill Jones for giving me shelter and support during the early years in the creation of this book.

And finally to may wife Disign Monill for marror doubting and timelegally modified with mento

And imany, to my wife koisin wagin for never doubting and direlessly working with me to create and develop this book through its many stages and manifestations.

Image Credits

Illustrations from the first edition of Lewis Carroll's *Alice's Adventures in Wonderland* are by John Tenniel. London: Macmillan, 1865. Found on pages 1.1, 1.11, 2.1, 2.5 (bottom right), 3.1, 4.1, 5.1, 6.1, 6.15, 7.1, 7.3, 7.24–8.2, 9.1, 10.1, 11.1, 11.6, 12.1, 12.8.

INTRODUCTION

- *xii. Garratt, Arthur. *Tom Tower*, illustration from *Christ Church, Oxford: An Anthology in Prose* & *Verse*, by Arthur Hassall. London: Hodder and Stoughton, 1911.
- fm1.1. *Lewis Carroll*. c.1870. Photomechanical print. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- fm1.2. Carroll, Lewis. What I Look Like When I'm Lecturing. 1868. Drawing. In The Life and Letters of Lewis Carroll, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- itr.3. Carroll, Lewis. *Carroll with MacDonald Children*. c.1862. Photograph. In *Lewis Carroll: A Biography*, by Morton N. Cohen. New York: Knopf, 1995.
- itr.4. Garratt, Arthur. *The Library (Interior)*, illustration from *Christ Church, Oxford: An Anthology in Prose & Verse*, by Arthur Hassall. London: Hodder and Stoughton, 1911.
- itr.5. Garratt, Arthur. *Great Quadrangle II*, illustration from *Christ Church, Oxford: An Anthology in Prose & Verse*, by Arthur Hassall. London: Hodder and Stoughton, 1911.
- itr.6. Garratt, Arthur. *Christ Church from Lady Montagu's Meadow*, illustration from *Christ Church, Oxford: An Anthology in Prose & Verse*, by Arthur Hassall. London: Hodder and Stoughton, 1911.

Part One: Alice's Adventures in Wonderland

PRELUDE POEM: ALL IN THE GOLDEN AFTERNOON

- P1.2. Carroll, Lewis. *Alice Liddell*. 1858. Wet collodion glass-plate negative. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- P1.3. Turner, Joseph Mallord William. *Christ Church Cathedral and Deanery, Oxford*. c.1795. Watercolour on paper. Corpus Christi College, Oxford. Courtesy of © Corpus Christi College, Oxford and The Bridgeman Art Library.
- P1.4. Haslehust, Ernest William. *Folly Bridge*, *Oxford*, illustration from *The Thames*, by G.E. Mitton. London: Blackie & Son, 1910. Courtesy of Saint Michael's College Library, Toronto, and the Thomas Fisher Rare Book Library, Toronto.
- P1.5. Carroll, Lewis. Alice Liddell; Ina Liddell; Harry Liddell; Edith Mary Liddell. 1860. Albumen

- print. National Portrait Gallery, London. © National Portrait Gallery, London.
- P1.6. Carroll, Lewis. *Three Liddell Sisters Playing Ukulele*. c.1860. Photograph. Reprinted with the permission of AP Watt Limited on behalf of the Lewis Carroll Society of North America and the Executors of the C.L. Dodgson Estate.
- P1.6. The Three Fates. Date unknown. Illustration.
- P1.7. Thumann, Friedrich Paul. *The Morae (or Three Fates)*. c.19th century. Porcelain plaque.

CHAPTER 1: DOWN THE RABBIT-HOLE

- **1.2.** Rossetti, Dante Gabriel. *Proserpine (Persephone)*. 1874. Oil on canvas. Tate Britain, London. Provenance © Tate, London, 2014.
- 1.3. Carroll, Lewis. *Alice Liddell as Queen of the May.* c.1860. Photograph. Reprinted with the permission of AP Watt Limited on behalf of the Lewis Carroll Society of North America and the Executors of the C.L. Dodgson Estate.
- 1.4. Gehrts, Johannes. *Ostara*, illustration from *Walhall*, by Felix Dahn and Therese Dahn. Leipzig: Breitkopf & Härtel, 1885.
- 16 (bottom). Woodward, Alice B. *Alice and Sister with White Rabbit*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: George Bell & Sons, 1913. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 1.5. Maull, Henry, George Henry Polyblank, and D.J. Pound. *Sir Henry Wentworth Acland*. c.1859. Stipple engraved print. Wellcome Library, London. Courtesy of the Wellcome Library, London.
- 1.6. Landseer, Edwin Henry. Scene from A Midsummer Night's Dream: Titania and Bottom. c.1850.
 Oil on canvas. National Gallery of Victoria, Melbourne. Courtesy of the National Gallery of Victoria, Melbourne; Felton Bequest, 1932.
- 1.7. Michelspacher, Steffan, and Raphael Custos. *Mittel: Coniunction*. 1615. Engraved plates. In *The Golden Game: Alchemical Engravings of the Seventeenth Century*, by Stanislas Klossowski De Rola. London: Thames and Hudson, 1988.
- 1.10. Jackson, A.E, and C.A. Federer. "The rabbit started violently and scurried away", illustration from Alice's Adventures in Wonderland, by Lewis Carroll. New York: Garden City Publishing, n.d.
- 1.12. Garratt, Arthur. *The Hall*, illustration from *Christ Church, Oxford: An Anthology in Prose & Verse*, by Arthur Hassall. London: Hodder and Stoughton, 1911.
- 1.13. Tarrant, Margaret Winifred. *Tiny Alice at Glass Table*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: Ward, Lock & Co., 1916. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 1.14. Gandy, Joseph. *Temple of Ceres at Eleusis*. 1818. Watercolour. Sir John Soane's Museum, London. Courtesy of the Trustees of Sir John Soane's Museum, London.

1.15. Bowring, Josiah. *First Degree Tracing Board*. 1819. Oil on wood. The Library and Museum of Freemasonry, London. In *Alchemy & Mysticism: The Hermetic Museum*, by Alexander Roob. Los Angeles: Taschen, 1997.

CHAPTER 2: THE POOL OF TEARS

- **2.2.** Nash, A.A. *Nine Foot Alice*, illustration from *Alice in Wonderland*, by Lewis Carroll. London: Juvenile Productions Ltd., 1945.
- 2.3. Tarrant, Margaret Winifred. *Alice Peering Through the Curtain Door*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: Ward, Lock & Co., 1916. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 2.4. Batey, Mavis. *Brass Firedog*, photograph from *Alice's Adventures in Oxford*, by Mavis Batey. Andover: Pitkin Pictorials, 1980. Courtesy of Brasenose College, Oxford.
- 2.6. de Champaigne, Philippe. *Saint Augustine*. c.1650. Oil on canvas. Los Angeles County Museum of Art, Los Angeles. Courtesy of the Los Angeles County Museum of Art, Los Angeles.
- 44. Soper, George. "The Mouse gave a sudden leap out of the water", illustration from Alice's Adventures in Wonderland, by Lewis Carroll. London: Headley, 1911. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- **2.7.** Moreelse, Johannes. *Heraclitus*. c.1630. Oil on oak. Centraal Museum, Utrecht. Courtesy of the Centraal Museum, Utrecht.
- 2.8. Dürer, Albrecht. *Melencolia I (Die Melancholie)*. 1514. Engraving. Städelsches Kunstinstitut und Städtische Galerie, Frankfurt. Courtesy of the Städelsches Kunstinstitut und Städtische Galerie, Frankfurt.
- 2.9. Mary Prickett. c.1860s. Photograph. Courtesy of the BBC, Oxford.
- **2.10**. Rackham, Arthur. *The Pool of Tears*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: William Heinemann, 1907.

CHAPTER 3: A CAUCUS-RACE AND A LONG TALE

- 3.2. Nash, A.A. *Alice Emerging from the Pool*, illustration from *Alice in Wonderland*, by Lewis Carroll. London: Juvenile Productions Ltd., 1945.
- 3.3. Carroll, Lewis. *Edith Mary Liddell*. 1860. Albumen print. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.
- 3.4. Carroll, Lewis. *Ina Liddell*. 1858. Albumen print. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.
- 3.5. Pellegrini, Carlo. "A Court parson" (Reverend Canon Robinson Duckworth), illustration from Vanity Fair, January 2, 1886.
- 3.6. Savery, Jan. Dodo. 1651. Painting. Oxford University Museum of Natural History, Oxford.

- Courtesy of the Oxford University Museum of Natural History, Oxford.
- 3.7. Zeno of Citium. 1692. Engraving. In *Galerie der alten Griechen und Römer*, by Georg Wilhelm Zapf and Gottlieb Friedrich Riedel. Augsburg: Bürglen, 1801.
- 3.8. Turner, William (Turner of Oxford). *Nuneham Courtenay rustic bridge and cottage, near Abingdon*. c.19th century. Watercolour and bodycolour on paper. © Chris Beetles Ltd, London and The Bridgeman Art Library.
- 3.9. Rackham, Arthur. *Dodo and Alice*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: William Heinemann, 1907.
- 3.10. Doré, Gustave. *Council of Mice*, illustration from *Les fables de la Fontaine*, by Jean de La Fontaine. Paris: Éditions Hachette, 1867.
- 3.11. Nash, A.A. *Caucus-Race*. c.1930s. Illustration. In *Alice's Adventures in Wonderland: A Classic Illustrated Edition*, by Lewis Carroll, and compiled by Cooper Edens. San Francisco: Chronicle Books, 2010.
- 3.12. Carroll, Lewis. *Thomas Jones Prout*. 1857. Albumen print. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.
- 3.13. Carroll, Lewis. *Mouse's Tale*, illustration from *Alice's Adventures Under Ground*, by Lewis Carroll. London: Macmillan, 1886. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 3.14. *Mouse's Tale*, text design from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: Macmillan, 1865.
- 3.15. Carroll, Lewis. *Arthur Penrhyn Stanley*. c.1852–1860. Albumen print. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.

CHAPTER 4: THE RABBIT SENDS IN A LITTLE BILL

- **4.2.** Newell, Peter. "Why, Mary Ann, what are you doing here?", illustration from Alice's Adventures in Wonderland, by Lewis Carroll. New York: Harper & Brothers, 1901. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- **4.3**. Barth, Ferdinand. *Der Zauberlehrling (The Sorcerer's Apprentice)*, illustration from *Goethe's Werke*, by Johann Wolfgang von Goethe. Stuttgart: Deutsche Verlags-Anstalt, 1882.
- **4.4.** Reeve, Michael. *Oxford University Museum of Natural History*. 2004. Photograph. Courtesy of Michael Reeve and the Oxford University Museum of Natural History, Oxford.
- 4.5. Winter, Milo. *Rabbit's House with Lizard on Ladder*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. Chicago: Rand McNally & Company, 1916. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- **4.6.** Neve, Cornelius. *Elias Ashmole Portrait as Royal Herald*. 1664. Painting. Courtesy of the private collection of Sir William Dugdale, Blyth Hall, Warwickshire.
- 4.7. Elias Ashmole's Coat of Arms. 1925. Stained glass. Museum of the History of Science, Oxford.

- Photograph courtesy of Andrew Gray, 2007, and the Museum of the History of Science, Oxford.
- **4.8**. *Hermes, or Mercury*, illustration from *Manual of Mythology*, by Alexander S. Murray. Philadelphia: David McKay, 1895.
- 4.9. Acland, Henry (attributed). *James O'Shea at work on carvings for the Oxford Museum of Natural History*. 1858. Photograph. Courtesy of the Oxford University Museum of Natural History, Oxford.
- **4.11**. Pellegrini, Carlo. *Statesmen, No.* 2 (W.E. Gladstone), illustration from *Vanity Fair*, February 6, 1869.
- 4.10. Pellegrini, Carlo. Right Hon: B. Disraeli, illustration from Vanity Fair, January 30, 1869.
- 4.12. Holiday, Henry. "The beaver brought paper, portfolio, pens", illustration from The Hunting of the Snark, by Lewis Carroll. London: Macmillan, 1876. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 4.13. Tissot, James. *Men of the Day, No.* 33 (Charles Darwin), illustration from *Vanity Fair*, September 30, 1871.
- 87. Walker, W.H. *Rabbit Throwing Pebbles*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: John Lane, 1907. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- **4.14**. Pellegrini, Carlo. *Men of the Day, No.* 19 (Thomas Henry Huxley), illustration from *Vanity Fair*, January 28, 1871.

CHAPTER 5: ADVICE FROM A CATERPILLAR

- 5.2. Kay, Gertrude. "You!" said the Caterpillar contemptuously. "Who are you?", illustration from Alice's Adventures in Wonderland, by Lewis Carroll. Philadelphia: J.B. Lippincott, 1923. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 5.3. Watson-Gordon, Sir John. *Thomas De Quincey*. c.1845. Oil on canvas. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.
- 5.4. *Pythagoras*. Copy of c.5th century BC original. Marble sculpture. Albani Collection, Musei Capitolini, Rome. Courtesy of the Musei Capitolini, Rome.
- 5.5. Bronnikov, Fedor Andreevich. *Pythagoreans' Hymn to the Rising Sun.* 1869. Oil on canvas. Tretyakov Gallery, Moscow. Courtesy of the Tretyakov Gallery, Moscow, Russia and The Bridgeman Art Library.
- 5.6. Pellegrini, Carlo. "The science of Language" (Max Müller), illustration from Vanity Fair, February 26, 1875.
- 5.7. Disdéri, André-Adolphe-Eugène (attributed). Sir Edward Bulwer-Lytton. Date unknown. Photograph. Wellcome Library, London. Courtesy of the Wellcome Library, London.

- 5.8. Carroll, Lewis. *Alice and the Caterpillar*, illustration from *Alice's Adventures Under Ground*, by Lewis Carroll. London: Macmillan, 1886. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 5.10. Carroll, Lewis. *Benjamin Jowett*. Date unknown. Photograph. Reprinted with the permission of AP Watt Limited on behalf of the Lewis Carroll Society of North America and the Executors of the C.L. Dodgson Estate.
- 5.11. Soper, George. "Serpent!' screamed the Pigeon", illustration from Alice's Adventures in Wonderland, by Lewis Carroll. London: Headley, 1911. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 5.12. *Jupiter Dodoneus*, illustration from *Historia Deorum Fatidicorum*, *Vatum*, *Sibyllarum*, *Phoebadum*, by Pierre Mussard. Geneva: Sumptibus Petri Chovet, 1675. Courtesy of the Mary Evans Picture Library, London.
- 5.13. *Serpent and Egg*, illustration from *A New System or Analysis of Ancient Mythology*, by Jacob Bryant. London: T. Payne, 1774. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- **5.14.** Rossetti, Dante Gabriel. *Mnemosyne*. c.1875. Oil on canvas. Delaware Art Museum, Wilmington. Courtesy of the Delaware Art Museum, Wilmington.

CHAPTER 6: PIG AND PEPPER

- 6.2. Collier, John. *Priestess of Delphi*. 1891. Oil on canvas. Art Gallery of South Australia, Adelaide. Courtesy of the Art Gallery of South Australia, Adelaide; Gift of the Rt. Honourable, the Earl of Kintore, 1893.
- 6.3. Nash, A.A. *Duchess and Cook in the Kitchen*, illustration from *Alice in Wonderland*, by Lewis Carroll. London: Juvenile Productions Ltd., 1945.
- 6.4. Pugin, Augustus Charles, and F.C. Lewis. *Kitchen at Christ Church*, illustration from *A History of the University of Oxford*, by William Combe. London: R. Ackermann, 1814. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 6.5. Pellegrini, Carlo. *Statesmen, No.* 25 (Oxford Bishop Wilberforce), illustration from *Vanity Fair*, July 4, 1869.
- 6.6. Ward, Sir L. *Men of the Day, No.* 57 (Sir Richard Owen), illustration from *Vanity Fair*, March 1, 1873.
- 6.7. *Sir Richard Owen*. c.1861. Line engraving. Wellcome Library, London. Courtesy of the Wellcome Library, London.
- 125 (top). Rackham, Arthur. *The Baby Pig*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: William Heinemann, 1907.
- 6.8. Sambourne, Linley. *Water-Babies Cartoon*, illustration from *The Water-Babies*, by Charles Kinsley. London: Macmillan, 1885. Courtesy of the Thomas Fisher Rare Book Library, Toronto.

- 6.9. Waterhouse, John William. *Consulting the Oracle*. 1884. Oil on canvas. Tate, London. Provenance ©Tate, London, 2014.
- 6.10. Matsys, Quentin. *Paracelsus*. c.17th century copy of the lost original by Matsys. Oil on wood. Louvre Museum, Paris. Courtesy of the Louvre, Paris. Museum 6.11. Matsys, Quentin. *An Old Woman*. c.1513. Oil on oak. National Gallery, London. Courtesy of the National Gallery, London.
- 6.12. Nash, A.A. *Fish-Footman at Door*, illustration from *Alice in Wonderland*, by Lewis Carroll. London: Juvenile Productions Ltd., 1945.
- 6.14. Garratt, Arthur. *Edward Bouverie Pusey*, illustration from *Christ Church, Oxford: An Anthology in Prose & Verse*, by Arthur Hassall. London: Hodder and Stoughton, 1911.
- 6.13. *Christ Church Coat of Arms*. Reprinted with permission of the Dean and Chapter of Christ Church, Oxford.
- 6.17. *The Naxian Sphinx*. c.560 BC. Marble sculpture. Delphi Archaeological Museum, Greece. Courtesy of the Delphi Archaeological Museum, Greece and the Hellenic Ministry of Culture.
- 6.18. Rubens, Peter Paul, and P. Pontius. *Socrates*. 1638. Line engraving. Wellcome Library, London. Courtesy of the Wellcome Library, London.

CHAPTER 7: A MAD TEA-PARTY

- 7.2. Rackham, Arthur. *Mad Tea Party*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: William Heinemann, 1907.
- 7.4. Cundall & Downes. *Charles Kingsley*. Date unknown. Photograph. Wellcome Library, London. Courtesy of the Wellcome Library, London.
- 7.5. Westall, William, and John Bluck. *Quadrangle of Trinity College*, illustration from *A History of the University of Cambridge*, by William Combe. London: R. Ackermann, 1815. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 7.6. Robinson, John Henry. *Julius Charles Hare*. 1852. Stipple engraving. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.
- 7.7. Kilburn, William Edward, and Samuel E. Poulton. (*John*) Frederick Denison Maurice. c.1860s. Albumen carte-de-visite. National Portrait Gallery, London. © National Portrait Gallery, London.
- 7.8. Merian, Matthäus, and T. de Bry. *Robert Fludd*. 1645. Line engraving. Wellcome Library, London. Courtesy of the Wellcome Library, London.
- 7.2. *Michael Maier*, illustration from *Symbola avreae mensae dvodecim nationvm*, by Michael Maier. Frankfurt: Typis Antonij Hummij, 1617.
- 7.10. Houbraken, Jacobus. *Francis Bacon, Viscount St Albans*. c.18th century. Line engraving. Wellcome Library, London. Courtesy of the Wellcome Library, London.

- 7.11. Vouët, Simon, and Michel Dorigny. *Bacchus [Dionysus]*. 1645. Intaglio print. Wellcome Library, London. Courtesy of the Wellcome Library, London.
- 7.12. Rubens, Peter Paul, and Frans van den Wyngaerde. A bacchanalian scene with Pan sleeping and many drinking vessels left on a table. c.1650. Etching. Wellcome Library, London. Courtesy of the Wellcome Library, London.
- 7.13. Faucci, Carlo, after Peter Paul Rubens. *Bacchanalian Group*. 1768. Print. Courtesy of Fine Arts Museums of San Francisco, San Francisco; Achenbach Foundation for Graphic Arts.
- 7.14. Old Father Time. Date unknown. Illustration.
- 7.15. Siemiradzki, Henryk. *Bacchanalia*. 1890. Oil on canvas. Serpukhov Historical and Art Museum, Russia. Courtesy of SuperStock.
- 7.17. Carroll, Lewis. *Edith Mary Liddell; Ina Liddell; Alice Liddell*. 1860. Wet collodion glass plate negative. National Portrait Gallery, London. © National Portrait Gallery, London.
- 7.18. Burne-Jones, Edward. *St. Frideswide Window*. 1859. Stained glass. Latin Chapel, Christ Church Cathedral, Oxford. Courtesy of Christ Church Cathedral, Oxford.
- 7.19. de Rooy, Lenny. *Deanery Garden Door*. c.2008. Photograph from http://www.alice-in-wonderland.net. > Used with the photographer's permission.
- 7.20. van Gent, Justus. *John Duns Scotus*. c.15th century. Painting. Galleria Nazionale delle Marche, Urbino. Courtesy of the Galleria Nazionale delle Marche, Urbino, Italy.
- 7.21. William of Occam. Date unknown. Stained glass. Church of All Saints, Ockham Parish, Guildford, Surrey. Photograph courtesy of Moscarlop, 2007.
- 7.22. Board, Ernest. *Roger Bacon in his Observatory at Merton College, Oxford*. c.late 19th century. Oil on canvas. Wellcome Library, London. Courtesy of the Wellcome Library, London.
- 7.23. Tarrant, Margaret Winifred. *Alice and Hare with Mad Hatter's Watch*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: Ward, Lock & Co., 1916. Courtesy of the Thomas Fisher Rare Book Library, Toronto.

CHAPTER 8: THE QUEEN'S CROQUET-GROUND

- **8.3.** Carroll, Lewis. *Sisters in Deanery Croquette Garden*. c.1860. Photograph. Reprinted with the permission of AP Watt Limited on behalf of the Lewis Carroll Society of North America and the Executors of the C.L. Dodgson Estate.
- 8.4. Maier, Michael, and Johann Theodor. *Dem Mann ohne Füße bleibt der Philosophische Rosengarten verschlossen*. 1618. Engraving. In *Alchemy & Mysticism: The Hermetic Museum*, by Alexander Roob. Los Angeles: Taschen, 1997.
- 8.5. Michelspacher, Steffan, and Raphael Custos. *Endt. Multiplication*. 1615. Engraved plates. In *Alchemy & Mysticism: The Hermetic Museum*, by Alexander Roob. Los Angeles: Taschen, 1997.
- 8.6. Knapp, J. Augustus. Drawing of Pythagoras, illustration from The Secret Teachings of All Ages,

- by Manly P. Hall. San Francisco: H.S. Crocker Company, 1928.
- **8.7**. Saenredam, Jan. *Antrum Platonicum*. 1604. Engraving. British Museum, London. Courtesy of the British Museum, London.
- 8.8. Royal Visit of Tom Quad 1863 with Alice Liddell. 1863. Photograph. In Alice's Adventures in Oxford, by Mavis Batey. Andover: Pitkin Pictorials, 1980. Courtesy of Brasenose College, Oxford.
- 8.9. Carroll, Lewis (attributed). Dean Henry George Liddell. c.1870. Photograph.
- 8.10. Bouguereau, Adolphe William. Orestes Pursued by the Furies. 1862. Oil on canvas. Chrysler Museum of Art, Virginia. Courtesy of the Chrysler Museum of Art, Virginia; Gift of Walter P. Chrysler, Jr.
- 8.11. Carroll, Lewis. *Dean Liddell's wife, Lorina, mother of Alice*. c.1860s. Photograph. In Karoline Leach, *Shadow of the Dreamchild: A New Understanding of Lewis Carroll*. London: Peter Owen, 1999.
- **8.12.** *Christ Church Coat of Arms.* Reprinted with permission of the Dean and Chapter of Christ Church, Oxford.
- 8.13. Soper, George. *Cheshire Cat, King and Executioner*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: Headley, 1911. Courtesy of the Thomas Fisher Rare Book Library, Toronto.

CHAPTER 9: THE mock turtle'S STORY

- 9.2. Kay, Gertrude. "Tut, tut, child!" said the Duchess, illustration from Alice's Adventures in Wonderland, by Lewis Carroll. London: J.B. Lippincott, 1923. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 9.3. Rackham, Arthur. *The Mock Turtle, Alice and Gryphon Seated*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: William Heinemann, 1907.
- 9.4. Ward, Leslie. *High Church* (Henry Parry Liddon), illustration from *Vanity Fair*, September 16, 1876.
- 9.5. Carroll, Lewis. *Canon Liddon*. 1867. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- 9.6. Raphael. Plato and Aristotle from *The School of Athens*. 1509. Fresco. Stanza della Segnatura, Palazzi Pontifici, Vatican. Courtesy of Palazzi Pontifici, Vatican.
- 9.7. Blake, William. *Beatrice Addressing Dante from the Car.* c.1824–1827. Ink and watercolour on paper. Tate Britain, London. Provenance ©Tate, London, 2014.
- 9.8. Cecioni, Adriano. *Men of the Day, No.* 40 (John Ruskin), illustration from *Vanity Fair*, February 17, 1872.

CHAPTER 10: THE LOBSTER-QUADRILLE

- 10.2. Hudson, Gwynedd M. *Alice, Mock Turtle, and Gryphon Dancing*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: Hodder, 1922. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 10.3. Carroll, Lewis. *Sir John Millais*. 1865. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- 10.4. Folkard, Charles. *Salmon Come Up*, illustration from *Songs from Alice in Wonderland and Through the Looking-Glass*, by Lewis Carroll and Lucy E. Broadwood. London: A. and C. Black, 1921. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 10.5. Baxter, George. *The Great Exhibition (Interior)*. 1851. Baxter Method oil print. E.J. Pratt Library, George Baxter Collection, Victoria University, Toronto. Courtesy of Victoria University, Toronto.
- 10.6. Frost, Arthur B. *Hiawatha's Photographing*. In *Phantasmagoria and Other Poems*, by Lewis Carroll. London: Macmillan, 1869. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 10.7. Carroll, Lewis. *The Late Duke of Albany*. 1875. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- 10.8. Carroll, Lewis. *Arthur Hughes and His Daughter Agnes*. 1863. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- 10.9. Carroll, Lewis. *Tom Taylor*. 1863. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- 10.10. Carroll, Lewis. *Professor Faraday*. 1860. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- 10.11. Carroll, Lewis. *Holman Hunt*. 1860. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- 10.12. Carroll, Lewis. *Ellen Terry*. Date unknown. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood.. New York: The Century Co., 1898.
- 10.13. Carroll, Lewis. Dante Gabriel Rossetti. c.1863. Photograph.
- 10.14. Pellegrini, Carlo. *Men of the Day, No.* 28 (Tennyson), illustration from *Vanity Fair*, July 27, 1871.
- 10.15. Carroll, Lewis. *Alfred Tennyson*. 1857. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.

CHAPTER 11: WHO STOLE THE TARTS?

- 11.2. Kay, Gertrude. *King and Queen of Hearts at Trial*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: J.B. Lippincott, 1923. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 11.3. Pluto and Proserpina, illustration from Manual of Mythology, by Alexander S. Murray.

- Philadelphia: David McKay, 1895.
- 11.4. Restout, Jean II. *Orpheus in the Underworld reclaiming Eurydice* or *The Music*. 1763. Oil on canvas. Louvre Museum, Paris. Courtesy of the Louvre Museum, Paris and The Bridgeman Art Library.
- 11.5. Mackenzie, Frederick. *Chapter House*, illustration from *A History of the University of Oxford*, by William Combe. London: R. Ackermann, 1814. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 11.7. Carroll, Lewis. *Knave of Hearts Kissing a Tart*, illustration from *Alice's Adventures Under Ground*. London: MacMillan, 1886. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 11.8. Weighing of the Heart. c.1275 BC. Paint on papyrus. British Museum, London. Courtesy of the British Museum, London.
- 11.10. Carroll, Lewis. *Lewis Carroll, Aged* 23. c.1855. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- 11.11. Carroll, Lewis. *Lorina, Alice, and Edith Liddell*. 1858. Wet collodion glass plate negative. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.

CHAPTER 12: ALICE'S EVIDENCE

- **12.2**. Blake, William. *Minos*. c.1824–1827. Pen, ink, and watercolour over pencil and chalk. National Gallery of Victoria, Australia. Courtesy of the National Gallery of Victoria, Australia.
- 12.3. *George Boole*. c.1850. Illustration. Computer History Museum, California. Courtesy of the Computer History Museum, California.
- **12.4.** Carroll, Lewis. *Venn Diagrams vs. Dodgson Diagrams*, illustrations from *Symbolic Logic*, by Lewis Carroll. London: Macmillan, 1897.
- 12.5. Carroll, Lewis. *The Game of Logic*, illustration from *Symbolic Logic*, by Lewis Carroll. London: Macmillan, 1897.
- 12.6. Carroll, Lewis. *A Syllogism Worked Out*, illustration from *Symbolic Logic*, by Lewis Carroll. London: Macmillan, 1897.
- 12.7. Sawyer, John Robert. *Augustus De Morgan*. c.1860s—early 1870s. Albumen carte-de-visite. National Portrait Gallery, London. © National Portrait Gallery, London.
- 12.9. Leighton, Frederic. *The Return of Persephone*. 1891. Oil on canvas. Leeds Art Gallery, Leeds. Courtesy of Leeds Museums and Galleries, City Art Gallery.
- **12.10.** Soper, George. *Alice and Flying Cards*, illustration from *Alice's Adventures in Wonderland*, by Lewis Carroll. London: Headley, 1911. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- 12.11. Holiday, Henry. Fit the Third: The Baker's Tale, illustration from The Hunting of the Snark,

- by Lewis Carroll. London: MacMillan, 1876. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- **12.12.** Cameron, Julia Margaret. *Ceres (Alice Liddell)*. 1872. Albumen print. Courtesy of Sotheby's.
- 12.13. Cameron, Julia Margaret. *Alice Liddell*. c.1872. Albumen print. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.
- **12.14.** Cameron, Julia Margaret. *Alice Liddell as Pomona*. 1872. Albumen silver print from glass negative. Courtesy of the Metropolitan Museum of Art, New York; David Hunter McAlpin Fund, 1963.

Part Two: After Wonderland

- P2.1. Rackham, Arthur. *Trial (Who Stole the Tarts)*, illustration from *Alice's Adventures in Wonderland*. London: William Heinemann, 1907.
- P2.2. Carroll, Lewis. *Three Sisters*. 1862. Photograph. Reprinted with the permission of AP Watt Limited on behalf of the Lewis Carroll Society of North America and the Executors of the C.L. Dodgson Estate.
- P2.3. Carroll, Lewis. *Ina Liddell*. 1870. Albumen print. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.
- P2.4. Fluss, Robert. *Rosy Cross Rose*. 1633. Illustration. In *Alchemy & Mysticism: The Hermetic Museum*, by Alexander Roob. Los Angeles: Taschen, 1997.
- P2.5. Schweighardt, Theophilus. Speculum sophicum Rhodostauroticum. 1618. Engraving. In Alchemy & Mysticism: The Hermetic Museum, by Alexander Roob. Los Angeles: Taschen, 1997.
- P2.6. John Bowles & Son. Radcliffe Camera, Oxford: Panoramic View with All Soul's College, Brasenose College and the Bodleian Library. Date unknown. Line engraving. Wellcome Library, London. Courtesy of Wellcome Library, London.
- P2.7. da Bologna, Giovanni, and Edwin Lutyens. *Fountain of Mercury*. 1928. Lead copy of bronze original, in a stone basin. Photograph © Harshil Shah, 2006.
- P2.8. Baxter, George. *Houses of Parliament*. 1851. Baxter Method oil print. E.J. Pratt Library, George Baxter Collection, Victoria University, Toronto. Courtesy of Victoria University, Toronto.
- P2.9. Baxter, George. View of the Crystal Palace. 1851. Baxter Method oil print. E.J. Pratt Library, George Baxter Collection, Victoria University, Toronto. Courtesy of Victoria University, Toronto.
- P2.10. Carroll, Lewis. Henry George Liddell, Dean of Christ Church, Oxford. c.1860s. Photograph. In In the Shadow of the Dreamchild: A New Understanding of Lewis Carroll, by Karoline Leach. London: Peter Owen Publishers, 1999.

- P2.11. Rowlandson, Thomas. *Front View of Christ Church*. c.1770s–1820s. Etching with aquatint. In *Rowlandson's Oxford*, by A. Hamilton Gibbs. London: Kegan Paul, Trench, Trubner & Co. Ltd., 1911.
- P2.12. Tissot, James. *Men of the Day, No.* 36 (Matthew Arnold), illustration from *Vanity Fair*, November 11, 1871.
- P2.13. Ward, Leslie. "Greek" (Benjamin Jowett), illustration from Vanity Fair, February 26, 1876.
- P2.14. Pellegrini, Carlo. "Christchurch" (Henry George Liddell), illustration from Vanity Fair, January 30, 1875.
- P2.15. Richmond, Sir William Blake. *The Sisters (Edith Mary Liddell; Ina Liddell; Alice Liddell)*. 1867. Stipple engraving. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.
- P2.17. Bassano, Alexander. *Edith, Alice and Ina Liddell*. c.1876. Albumen print. Courtesy of the Alexander Bassano Collection.
- P2.16. Burne-Jones, Edward and William Morris. *St. Catherine Window*. 1878. Stained glass. Chapel of Remembrance, Christ Church, Oxford. Photograph from http://wordsandimagesbycynthia.com, courtesy of Cynthia Staples, 2013.
- P2.18. Cameron, Julia Margaret. *King Lear Allotting His Kingdom to His Three Daughters*. 1872. Albumen silver print from glass negative. Courtesy of The Metropolitan Museum of Art, Washington, D.C; Bequest of Maurice B. Sendak, 2013.
- P2.19. Holiday, Henry. *The Hunting of the Snark*, book cover illustration for *The Hunting of the Snark*, by Lewis Carroll. London: Macmillan, 1876. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- P2.20. *Alice Liddell*. c.1880. Albumen print. Emma Butterfield Collection, National Portrait Gallery, London. © National Portrait Gallery, London.
- P2.21. Quarrington, Harland. *Westminster Abbey Interior*. 2008. Photograph. Courtesy of Harland Quarrington and the Ministry of Defence, London.
- P2.22. *The Chestnuts, Guildford*. Date unknown. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- P2.23. Thomson, E. Gertrude. *The Nursery "Alice"*, book cover illustration for *The Nursery "Alice"*, by Lewis Carroll. London: Macmillan, 1890. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- P2.24. Facsimile of Programme of "Alice in Wonderland" Produced at the Royal Globe Theatre. 1888. In The Life and Letters of Lewis Carroll, by Stuart Dodgson Collingwood. New York: The Century Co., 1898.
- P2.25. Elliott, Joseph John, and Clarence Edmund Fry. *Alice and the Dormouse*. Date unknown. Photograph. In *The Life and Letters of Lewis Carroll*, by Stuart Dodgson Collingwood. New York:

- The Century Co., 1898.
- P2.26. Furniss, Harry. *Sylvie and Bruno*, book cover illustration for *Sylvie and Bruno*, by Lewis Carroll. London: Macmillan, 1889. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- P2.26. Furniss, Harry. *Sylvie and Bruno Concluded*, book cover illustration for *Sylvie and Bruno Concluded*, by Lewis Carroll. London: Macmillan, 1893. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- P2.27. von Herkomer, Sir Hubert. C.L. Dodgson. In Christ Church, Oxford: An Anthology in Prose & Verse, by Arthur Hassall. London: Hodder and Stoughton, 1911.
- P2.27. Watts, George Frederic. *Dean Henry George Liddell*. In *Christ Church, Oxford: An Anthology in Prose & Verse*, by Arthur Hassall. London: Hodder and Stoughton, 1911.
- P2.28. Carroll, Lewis. *Alice's Adventures Under Ground*, book cover illustration for *Alice's Adventures Under Ground*. London: Macmillan, 1886. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- P2.29. *Alice Hargreaves Receiving Doctorate*. 1932. Photograph. Photograph from http://www.cmrubinworld.com, courtesy of C.M. Rubin.
- P2.30. Peter Llewelyn Davies Portrait. 1917. Photograph. Courtesy of Neverpedia.com.
- P2.30. Peter Llewelyn Davies as a child. 1901. Photograph. Courtesy of Neverpedia.com.
- P2.30. Bedford, P.D. *Peter Pan and Wendy*, book cover illustration for *Peter Pan and Wendy*, by J.M. Barrie. London: Hodder and Stoughton, 1915. Courtesy of the Thomas Fisher Rare Book Library, Toronto.
- P2.31. Mons Philosophorum, an illustration from Geheime Figuren der Rosenkreuzer, aus dem 16ten und 17ten Jahrhundert, by J.D.A. Eckhardt. Hamburg: Altona, 1785. In Alchemy & Mysticism: The Hermetic Museum, by Alexander Roob. Los Angeles: Taschen, 1997.
- *Where not otherwise stated, all illustrations from books are from the library of David Day.

DAVID DAY is the author of over 40 books, including seven on the works of J.R.R. Tolkien, two on Arthurian myth, seven books of poetry, nine books for children and ten on natural history. His *The Doomsday Book of Animals*, updated as the *Encyclopedia of Vanished Species*, was a book of the year for *Time* magazine, *New Scientist* and the *Los Angeles Times*.

He began research on Lewis Carroll and *Alice's Adventures in Wonderland* while living in Britain in the 1990s. Initially planning on completing a book in time for the 1998 centenary of Carroll's death, he soon discovered that the multi-leveled complexities of *Alice* would take much longer to unravel.

David Day was born in Victoria, British Columbia, and lives in Toronto.